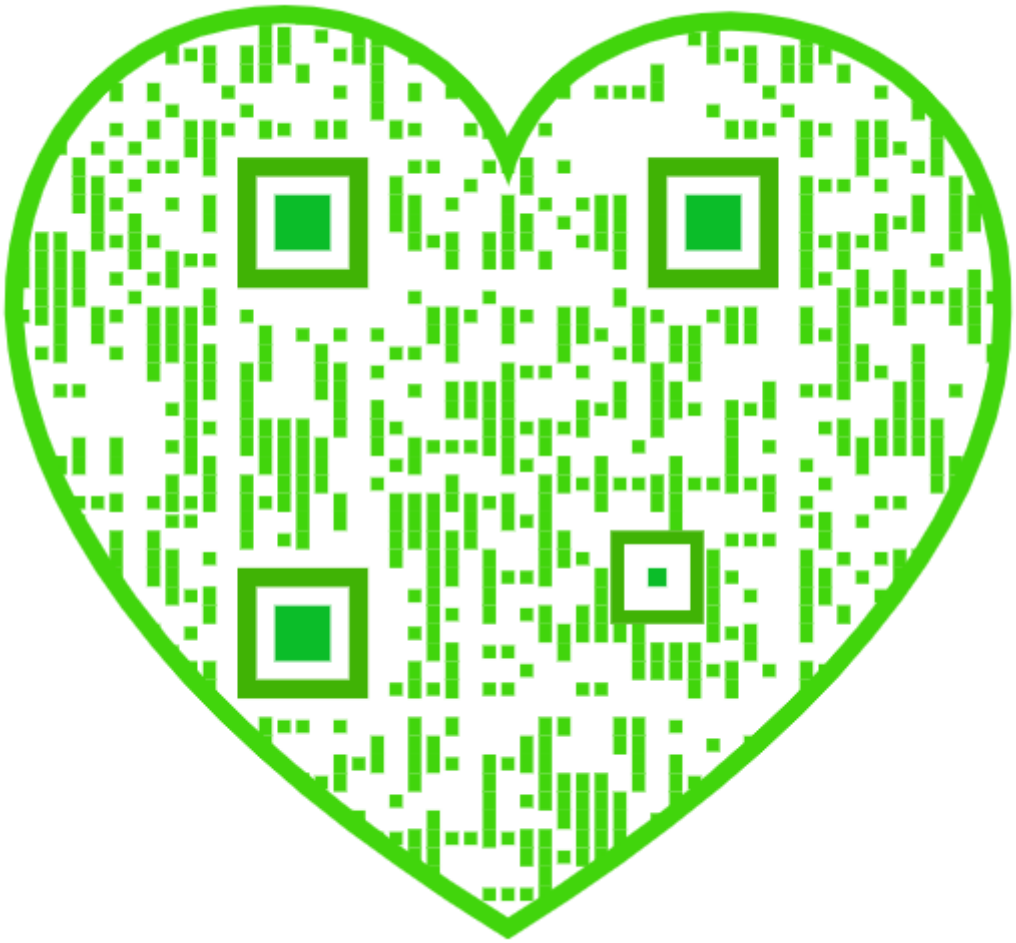

THE SUBSTANCE OF ECONOMICS

UNIV. OF CALIFORNIA

THE SUBSTANCE OF ECONOMICS

FOR THE STUDENT
AND THE GENERAL READER

BY

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PREFACE

THIS book is an endeavour to present to the student and the general reader the elements of economic theory and the practical and social implications in as concise a form as is consistent with clarity and understanding.

Some branches of economics permit of reduction to simple notes more readily than others. Where the subject under discussion is straightforward, one is able briefly to enumerate the salient points with only a loss of words. But where it is a matter of basic theory and analysis, lengthier and more reasoned treatment is essential. In working through the course, and summarizing where practicable, I have given relatively greater space to those parts which cannot be satisfactorily condensed.

Economics is a science of everyday life, and theory should be constantly tested in the light of practice. I have tried to keep the science as close to earth as possible without making it too earthy. Present-day conditions have constantly been borne in mind in the formulation and discussion of economic tendencies. It is not one's purpose or function in a book of this nature to take part in the many controversial problems that confront one at every turn. Yet there is the danger that a strict impartiality, if this is humanly possible, may make one's writings even more colourless than they are. This is my apology for any bias that may show itself in one or two places, though I have striven to give both sides of questions in dispute.

Professor Sir William Ashley kindly read through the manuscript, and I have to thank him for helpful criticism and advice. I am also indebted for a like service to my colleagues, Messrs. H. Hamilton and P. Barrett Whale, whose comments and suggestions were found extremely useful.

H. A. S.

September, 1922

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THE SUBSTANCE OF ECONOMICS

INTRODUCTION

SECTION I

THE NATURE OF ECONOMICS

NATURE AND DEFINITION OF ECONOMICS.

PEOPLE have wants, and have to work in order to satisfy them. As time goes on, their requirements grow in number and variety, while the methods and organization of supply become increasingly complex. In the following pages, a study will be made of these wants, and the efforts that are exerted to produce those commodities and services for their satisfaction.

The older economists, applying the term " wealth " to all those things that are necessary to gratify one's needs, used to say that Economics was a subject concerned with the principles of wealth-getting and wealth-using. This definition, however, does not sufficiently stress the human element, and is now considered too narrow. Truer and more comprehensive is the definition now usually accepted as standard—

" Political Economy or Economics is a study of man's actions in the ordinary business of life ; it inquires how he gets his income and how he uses it. . . . Thus it is on the one hand a study of wealth, and on the other, and more important side, a part of the study of man " (*Marshall*).

The term "Political Economy" is derived from the Greek. *Polis* meant the city-state, which was the territorial and political unit of Greek civilization. *Oikos* and *nomos* signified respectively "house" and "rule." The laws governing the management of the household were applied to the miniature state. In the same way as the housewife was expected to conserve and make full use of the household revenue, so the statesman was to strive at getting the maximum benefit for the community from the resources available.

ECONOMICS IN RELATION TO OTHER SOCIAL SCIENCES.

In a scientific treatment of any subject, facts are observed, collected, and classified; hypotheses and inferences are provisionally formulated; while the validity of such laws as emerge is constantly being tested by reference to facts already known, and others as they present themselves.

Economics is a science because such a method of inquiry is adopted with regard to the facts of economic life. It is only a branch, however, of the parent science of—

Sociology—which deals with the general principles of all social relations. Other branch sciences are—

Ethics—what a man *ought* or *ought not* to do, according to moral principles;

Law—what a man *may* or *may not* do, according to legal principles; and

Politics—dealing with man's relations to the State.

While it is possible, therefore, to discuss Economics as a science to itself, its relation to the other social sciences should not be overlooked. The distinction between them is made for purposes of study, and is more possible in theory than in action. Especially in the working

out of practical problems is it very difficult for the economist to remain uninfluenced by ethical and political considerations. This becomes inevitable, as Economics goes beyond a mere study of wealth, and concerns itself with the *welfare* of a community.

METHODS OF STUDY.

The modern economist combines the inductive and the deductive methods.

The **Deductive** method implies the reasoning from a few fundamental propositions, the truth of which is assumed, to further propositions and conclusions. The "Classical" economists[1] of a century ago used this method, and tried to make all economic phenomena fall within the ambit of some half-dozen laws. These economists were followed by the "Historical" school, who preferred the **Inductive** method, whereby a number of undisputed facts were collected, generalizations made about them, and these, in turn, tested by reference to further facts. In the last few decades there has been an increasing amount of scientific inquiry into economic and social conditions, and many valuable statistics and data have been obtained.

Obviously, the Inductive method is the more likely to yield satisfactory conclusions, though in practice it is often difficult, even if it were desirable, to separate the two methods. The best results are obtained when the methods are combined.

ECONOMIC LAWS.

Though the economist speaks about economic "laws," he does not attribute to them the same rigidity as, say, the chemist to his laws. Some writers prefer the less definite term, "economic tendency." Economics,

[1] *See* Appendix on "The Development of Economic Thought."

dealing with the motives and actions of human beings, cannot easily be resolved into a number of formulae, to which every human activity will be expected to conform. There are more " unknown quantities " than in exact sciences like chemistry and physics, and often one has to allow for varying conditions by inserting the phrase " other things being equal " in a statement of tendency. The operation of an economic law may be counteracted or concealed, but this does not disprove the law's existence and truth. The fixing of prices during the war seemed to some people a repudiation of the law of supply and demand, but subsequent developments only went to emphasize its truth.

GENERAL SURVEY OF SUBJECTS TO BE STUDIED.

In the definition given above, it was stated that wealth is an important, though by no means the only, subject in economic science. One may, therefore, begin with an inquiry into the nature of wealth and into the factors that go to produce it. These factors and the principles governing their application are examined in the economics of PRODUCTION.

It is a truism that man's desires impel him to productive effort. His wants decide what and how much will be produced. The subject of CONSUMPTION lies at the root of all economic problems, but its ramifications are too wide to be studied satisfactorily in a separate section. It will be considered as occasion requires under the appropriate headings.

In developed communities there are very few people who produce for themselves everything they require. Modern conditions and requirements make it practically impossible for a man to be economically independent, even if he wished it. Most people become specialized to supply a particular kind (or part) of commodity or

service, assuming that other members of society are producing the rest of the things required. This assumption rests upon an effective system of evaluation and exchange of goods. Hence the importance of the economics of VALUE and the MECHANISM OF EXCHANGE.

Having examined the principles of production and value, one proceeds to study the way in which the social product is shared out among the various factors of production, corresponding more or less to the different classes of the community. The question of how much goes to labour, to capital, etc., is discussed in the economics of DISTRIBUTION.

Finally, the position of the STATE in relation to certain phases of economic life will be considered; this will involve the study of PUBLIC FINANCE.

SECTION II

THE EVOLUTION OF INDUSTRY

ECONOMIC EVOLUTION.

IT is often necessary, when examining and trying to understand the present-day economic organization of society, to seek for an explanation in the factors that brought it about. A study of economic history is, indeed, the necessary complement to economic science. It is only possible here to give the very briefest survey of our general economic development.

Economic evolution may be regarded from several angles. One may look at it from the viewpoint of production, or of exchange and the market, or of the social and economic unit.

In early times, man's material wants were few and simple, and could be satisfied by his own direct efforts. **Hunting and fishing** were the principal means of living. As there was no specialization of functions, no exchange, no complex system of distribution, economic problems as we know them to-day did not exist. As time went on, man learned to tame and domesticate animals. This led to the **pastoral stage,** in which existence was made more secure and wealth was increased. What little exchange took place was effected by barter.

So far, man had lived a more or less nomadic life. The third stage, **agriculture,** was reached when he learned how to cultivate the soil. The land, which at first was held in common, added to the material comforts and supported a bigger population. Cultivation of the land also tended to fix his residence. In primitive times, man used what he could *find*; now he began

to *make* what he wanted. Alongside agriculture developed **handicrafts,** which gradually assumed an increasing share of man's activities until his whole time was often taken up. By now, money was in regular use, and trades were organized in gilds. (*See* below.) Effort for the satisfaction of wants was by this time very indirect, and the specialization of functions intense. The problem of distribution, too, was growing prominent. Eventually, the **factory era** was reached, the machine supplanted handicrafts, while agriculture in the " old " countries declined as fresh resources were discovered elsewhere.

GROWTH OF SOCIAL UNIT.

While this evolution had been going on, the unit of social life was growing in size. Commencing with the **family** in a tribal relationship, it developed into the manorial organization prevalent in the Middle Ages. The **manor** was a small community, economically self-sufficing. Agriculture was the principal occupation of the people, who held and cultivated the land in common. Almost everybody had a share of land, however small, the tenure being bound up with feudal dues and obligations. Common pasture and cultivation practically disappeared as the manor decayed, though traces of the old system are to be found in a few parts of England.

The unit of communal life grew in size as the **town** evolved. It must not be supposed that early town-life was inconsistent with agriculture, for this was often carried on within the town walls. Landholding used to be a necessary qualification for a burgess.

The town economy eventually developed into a **national** economy, and this in turn is being replaced by an **international** economy.

It is interesting to observe that economic development

always appears to go ahead of, and pave the way for, political development. Already we have reached the stage of international interdependence in industry and commerce, and this identity of economic interests may afford a strong foundation for amicable political relations.

DEVELOPMENT OF INDUSTRIAL ORGANIZATION.

Industrial organization has passed through the following stages—

(i) The Family System—Preceding and also contemporary with the mediaeval manor.

(ii) The Gild System—A town economy, from the Middle Ages to about the sixteenth century.

(iii) The Domestic System—Coincident with a national economy, roughly between the sixteenth and eighteenth centuries.

(iv) The Factory System—An international economy, typical of the nineteenth and twentieth centuries.

(i) **The Family System.** The household was the centre of economic life. Wants were very few, and were usually satisfied by the family's own direct efforts, with comparatively little specialization. Agriculture was the main occupation, and wage-earners in the modern sense of the word did not exist. Organization accordingly was very primitive.

(ii) **The Gild System.** The gilds were of first importance in the growth of the towns, which gradually supplanted the manor as the social unit. This meant a bigger scope for economic enterprise, both in the size of market, and in the nature and variety of goods. In many towns there was a gild for each of the principal trades, to which entrance was carefully limited. The gildsman, as a rule, was a small master working alongside a few apprentices and journeymen. His organization

effected powerful control over the production and quality of goods.

(iii) **The Domestic System.** As the gild system decayed, a new type of organization evolved in the form of the "domestic" system. People still worked in their homes, but—different from the "family" system—not for themselves, but for a merchant-employer. The *middleman* became prominent in industrial organization. Division of labour was extended, the organization being largely in the hands of the merchant, who was analogous to the modern employer. Relics of this system are still to be found among the hand chain-makers in the Black Country and the home-weavers in the Hebrides.

(iv) **The Factory System.** Since the Industrial Revolution, the economic organism has grown very complex. Production is now for a world market, specialization of functions has grown intense, while the mechanism of exchange has been considerably developed. Large-scale enterprise, joint-stock companies, banking, the credit system, etc., are all bound up with modern factory production, and are subjects of inquiry in the following chapters.

THE INDUSTRIAL REVOLUTION.

Changes in our industrial methods and structure came about during the eighteenth and nineteenth centuries on such an unprecedented scale as to elicit the term "Industrial Revolution." Hitherto, production had been relatively simple and on a small scale, carried on mainly by hand power, often in people's own homes. Agriculture had been the principal occupation, and England, until the end of the eighteenth century, exported food. During the sixteenth and seventeenth centuries, the policy of the State with relation to industry and

commerce was that of Mercantilism, in accordance with which the State took an active part in the regulation of economic conditions. This was evidenced in the Navigation Acts, the State interest in trading companies, apprenticeship regulations, etc. Together with the industrial changes, there was a reaction against the old Mercantilism with its restrictive tendencies. Its place was taken by the policy of non-interference or *laisser faire*, which reacted on the legislative and considerably facilitated the application of the new inventions and discoveries.

The economic changes that took place were mainly of the following kinds—

(i) **Discovery and Extension of Resources,** e.g. wheat fields abroad, ore supplies at home ; new foods, such as sago, tapioca, turnip, etc.

(ii) **Invention of Processes—**

(*a*) In *Mining and Engineering*, such inventions as the steam engine, the Davy lamp, Cort's rolling and puddling process, mild steel processes, etc.

(*b*) In *Textiles*, the flying shuttle, spinning frame, power loom, etc.

(*c*) In *Agriculture*, scientific fertilization, rotation of crops, etc.

(iii) **Changes in Transport.** The application of steam led to the steamboat (Bell's *Comet*, 1813) and the locomotive (Stephenson's *Rocket* 1829). Canals were constructed and the roads were much improved.

(iv) **Changes in Economic Structure—**

(*a*) In agriculture, enclosure of common land.

(*b*) Large-scale production and formation of joint-stock companies.

(*c*) Development of banking and the credit system.

General Results of Industrial Revolution—

(i) Centre of industry moved from home to factory.

(ii) Hand-power supplanted largely by steam-power, dependent on new coal and iron supplies.

(iii) Decline of villages and growth of towns.

(iv) Concentration of population in industrial districts of Midlands and North.

(v) Large-scale enterprise for a world market.

(vi) Increased scope for and use of capital.

(vii) Great increase in the national wealth (though the equity of the distribution among the different classes of the people is open to question).

ECONOMIC EVOLUTION.

The following table sums up the above developments in economic and social life—

Industrial Development.	Social Unit.	Exchange.	Market.	Central Government.
Hunting and Fishing Pastoral (Family)	Family	Barter	Little or none	Little
Agriculture	Manor	Money	Local	Mercantilism
Handicraft (Gild)	Town			
Domestic	National	Credit	National	
Factory	Empire & Commonwealth		International	*Laisser faire* Regulation

PART I

PRODUCTION AND CONSUMPTION OF WEALTH

CHAPTER I

PRODUCTION AND CONSUMPTION

THE MEANING OF WEALTH.

WEALTH is sometimes broadly defined as "anything that can satisfy a want," but this definition is not precise enough to be of much service to the economist. There are some kinds of goods that involve no effort and are so abundant in supply that they do not give rise to economic considerations, e.g. air, sunlight, etc. Though these are indispensable to life, they cannot be classed as economic wealth.

Economic Wealth is that which—

(i) Possesses utility, or the power to satisfy a want;

(ii) Is limited in quantity; and

(iii) Is transferable in its use (not necessarily transportable). Economic considerations centre around exchange, and if the use of a thing is not transferable, no economic transaction can take place. While a singer's voice cannot itself be transferred, the pleasure that others derive can have an economic value, the pleasure here being equivalent to the use.

Wealth can be classified according to whether it is—

(i) *Personal*, e.g. skill of surgeon or artisan; or *Material*, e.g. furniture.

(ii) *External*, e.g. furniture, goodwill of a business; or *Internal*, e.g. singer's vocal ability.

(Thus, goodwill and skill are respectively external and internal, though they are both personal.)

(iii) *Private*, e.g. furniture, suit of clothes ; or *Social*, e.g. roads.

NATURE OF UTILITY.

As indicated above, ***Utility is the attribute of anything that can satisfy a want, but it is not necessarily identical with " usefulness " in a moral or social sense.*** It is not the main business of the economist to determine whether a want is good or bad (this belongs to ethics), or whether the State should allow or disallow its satisfaction (this belongs to politics). If a thing is capable of satisfying some want, it possesses utility, though public policy may determine to limit or prohibit its use.

Two men may put a different utility on the same thing (e.g. an economics text-book or hair-restorer), and a man may derive from the same thing different utilities at different times. The personal element here is of great importance. *Apart from purely personal preferences*, **Utilities may be classified—**

(i) *Elemental Utility*, e.g. coal still in seams.

(ii) *Form Utility*, e.g. coal at the pit-head.

(iii) *Place Utility*—compare the utility of coal in an agricultural and an industrial district, or that of fish at a port and an inland town respectively.

(iv) *Time Utility*—compare the utility of coal in summer and winter, or that of a cup of coffee before and after dinner.

The subject of utility is of considerable import, and will come up for fuller treatment later in connection with the theory of value.

PRODUCTION AND PRODUCERS.

Production is the Creation of Utilities. When a chair is produced, the joiner takes so much wood, screws, etc.,

which have in themselves relatively little utility, and fashions them into something of greater utility. Similarly, the men who transport the chair from factory to home add a utility of place; the wholesalers, retailers, typists, etc., all contribute to the general process of production, and are entitled to rank as producers.

Instances occur, of course, where there are too many intermediaries, causing a certain amount of waste. It is very largely a matter of organization. One advantage of large-scale enterprise is that the number of "middlemen" is reduced to a minimum.

Production does not cease, therefore, when the commodity leaves the premises of the actual makers; the process is not complete until the article is in the hands of the consumer.

"Over-production" of a commodity, from the producer's point of view, takes place when the supply is greater than the effective demand. It may be caused by faulty organization, or too optimistic anticipation of the market, or through unavoidable external events. A better term would be "misdirected production." From the consumer's point of view, *general* over-production would be impossible while some wants are unsatisfied. It has been contended in some quarters that over-production is really the reflex of under-consumption.[1]

CONSUMPTION.

Consumption is the obverse of Production, in that it is the *destruction* (as opposed to the *creation*) of utilities. The act of consumption may occupy a second or two, or be spread over centuries (*cf.* the consumption of a

[1] More is said about over-production and under-consumption in connection with unemployment and trade depressions. (Chapters XI, §1, and XV, §3.)

sweet and a picture), and applies to both commodities and services.

It is not sufficient to take a *quantitative* view, merely, of production and consumption. The *quality* of the goods is important, not only for the superiority to be desired in itself, but also for the reason that shoddy goods, requiring continuous replacement, divert labour and resources from channels where they might be more usefully employed.

Production and consumption are, in a measure, relative terms, and the one often involves the other. What is the finished article to one group of men may be the material for others, e.g. iron used for making steel, steel for making nibs, nibs " consumed " by the professional writer in producing manuscripts, and so on.

Some writers have distinguished the processes of consumption according to whether a thing or service is used in advancing production by another stage (as just exemplified), or whether it is used for the direct and personal satisfaction (as a hat or visit to a theatre). They term these respectively " productive " and " unproductive " consumption. This distinction, however, is not very profitable; some so-called unproductive consumption is necessary for life itself.

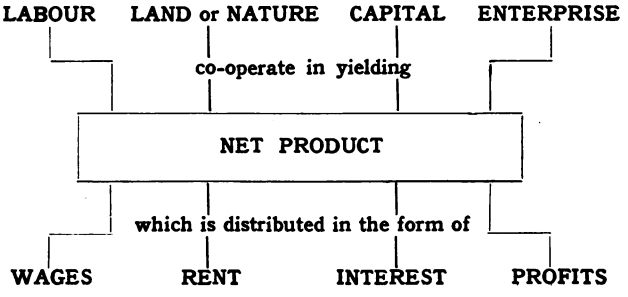
THE FACTORS OR AGENTS OF PRODUCTION.

In early times, only two factors were necessary for the production of any commodity, LABOUR and NATURAL RESOURCES. Production was very simple, no machinery or tools were used, and no long period of waiting elapsed between the first and last stages. As society evolved, man's needs grew more complex and his methods of production became less simple. He began to use tools, to put aside some of his product as a reserve or to be used in the production

of further commodities. This meant the use of CAPITAL as the third factor of production. In modern times it has been realized that a given amount of labour, capital and material in its natural state (or LAND as the economist calls it) may have their combined yield increased if they are co-ordinated and regulated under skilled guidance. Thus a fourth factor is discovered in ORGANIZATION. The term ENTERPRISE is sometimes preferred, on the ground that organization by itself is merely a form of superior labour (e.g. that of a works manager).

Of these four agents, Land and Labour are undoubtedly the most fundamental and the earliest in order of development, though the others are of great importance in modern history.

Labour and Enterprise may be regarded as the *active personal services*, while from Land and Capital are derived the *passive services of property*.



CHAPTER II

LABOUR

Section 1. *The Supply and Efficiency of Labour*

LABOUR.

LABOUR denotes all economic effort, mental and bodily, that is directed to the production of wealth. Effort for the sake of pleasure without any monetary consideration (like pure sport) is excluded from this definition.

Labour has been classified in various ways. One method is—

(i) Work of organizing.
(ii) Managing and supervising.
(iii) Skilled work, both manual and mental.
(iv) Unskilled work.

The distinction between these grades is, in certain cases, purely arbitrary, as they shade off almost imperceptibly into each other.

A better method, perhaps, of classifying labour is as follows—

(i) Responsible Mental (e.g. architect).
(ii) Automatic Mental (e.g. typist).
(iii) Responsible Manual (e.g. wood carver).
(iv) Automatic Manual (e.g. dock labourer).

LABOUR AND POPULATION.

The **supply of labour in general** depends, of course, on the growth of population, about which there has been much theorizing. Over a century ago, Thomas

Malthus formulated a doctrine which had considerable vogue for a time. Briefly, his theory was that population tended to increase in a *geometric ratio* and to double itself every twenty-five years; i.e. in every successive period population would grow thus: 2, 4, 8, 16, 32, etc. On the other hand, however, natural supplies of food and other necessaries only tend to increase in an *arithmetic ratio*, e.g. 2, 4, 6, 8, 10, 12, etc. This means that even if everybody, to start with, has ample supplies and some to spare, the time must come, sooner or later, when the population outgrows the means of subsistence. When in accordance with this alleged inexorable law of nature such a stage is reached, population must necessarily be restricted. This is done by the application of checks, by Nature, or by man himself, or by both. The *positive* checks of Nature are famine, disease, etc. The *preventive* checks applied by man are late marriages and moral restraint. Since Nature is ruthless and indiscriminating in cutting down the population, it behoves man in his own interests to apply his check consciously and deliberately.

This pessimistic doctrine influenced economic thought for nearly a century, and did much to earn economics the name of "the dismal science." Arising out of it, for example, was the "iron law of wages," which stated that any increase in the income of the workers leads to a growth in population, and eventually to keener competition for employment. This must result ultimately in a reduction of the wage to the subsistence level. (This theory is dealt with in more detail in Chapter VIII, § 2. *See also* Appendix.)

Needless to say, Malthus's doctrine of population, however true it *appeared* at the time, has lost much of its force, and is not borne out by the facts. Firstly,

population does not grow as quickly as he suggested. Secondly, the means of living have increased at a more rapid rate than a mere arithmetic ratio. Malthus and his followers did not appreciate the importance of inventions and man's resourcefulness.

THE EFFICIENCY OF LABOUR.

This depends on the following factors—

(i) Peculiarities of stock and breeding, e.g. the superiority of a white over a Lascar crew. The peculiarities are due partly to—

(ii) Climate and environment.

(iii) The standard of comfort, including quality and quantity of food and clothing. This will depend largely on (iv) and (v).

(iv) The wage received. *Up to a point*, an increase in spending power may be accompanied by an increase in efficiency.

(v) The manner in which the wage is spent.

(vi) Number of hours worked. *Up to a point*, a reduction in hours may bring about an increase in efficiency during the hours worked.[1]

(vii) General and technical education.

(viii) Factory and sanitary conditions.

(ix) Moral and social causes. Where a worker is dissatisfied, the work may suffer.

(x) The organization of the workshop and industry. Efficiency may be improved, often, through a wiser management and co-ordination, a judicious allocation of jobs, etc.

[1] Many advocates of the short working day contend that, owing to increased efficiency, the output may not suffer. Other supporters admit that there might be some reduction in output per man, but assert that, provided the shift system is introduced or extended, the fuller use of machinery and plant will yield economies which will more than compensate for the loss.

Section 2. The Division of Labour

DIVISION OF LABOUR.

This is the most fundamental principle in industrial organization. It means the specialization of labour-power, both among groups and individuals, in such a way that the output is greater than would otherwise be possible. In primitive times there was little or no specialization, beyond the apportioning of heavy and light duties among men and women respectively. As communities developed, the division of functions among various *groups* evolved more or less spontaneously. Later there was division of labour within the group. Present-day specialization applies to nations as well as to smaller groups and individuals.

It should be noted that *Division of Labour implies exchange*, and would not be of much use without it. (In early times, there was neither division of labour nor exchange.) The principle now is: "Each man to his job or part of a job." Probably a better term is *co-operation*, in that the groups and members of a group co-operate (i.e. work together), whether deliberately or otherwise, for the common benefit.[1]

"*Simple*" division of labour is that form in which a number of men work together on one task (e.g. pulling a load).

"*Complex*" division of labour indicates the apportioning of different tasks to different men, and is the kind usually referred to.

OCCUPATIONAL GROUPINGS.

The producing members of a community can be classified into the following groups—

[1] The co-operation is by no means perfect; faulty co-ordination of specialists is an important cause of depressions and unemployment. (Chaps. XI, §1 and XV, §3.)

(i) **Extractive,** i.e. extracting raw supplies from Nature (e.g. farming, fishing, lumbering).

(ii) **Constructive,** i.e. manufacturing and making-up into finished articles.

(iii) **Commercial**—

(*a*) Distributive, e.g. shopkeepers, travellers.

(*b*) Transport, e.g. railway services.

(*c*) Banking and Insurance.

(iv) **Direct and Public Services** to the consumer, e.g. services of teacher, singer, judge.

In early times there was, of course, no such grouping, as men were practically self-sufficing. When the division of labour developed among individuals, districts, and finally among nations, these groupings became more distinct. A couple of centuries ago, Great Britain like other countries was primarily extractive. To-day such interests are overshadowed by the constructive and the commercial. It is the "new" countries that are mainly extractive, providing the "old" countries largely with food and raw materials.

FORMS OF DIVISION OF LABOUR.

(i) **Division into Whole Industries and Callings,** e.g. cotton industry, mining, law. (*See* above.) This is a form of division of labour so primary that it is often ignored. A comparison with early times shows the remarkable change that has come about.

(ii) **Division of These Occupations into Groups of Complete Processes,** e.g. the wool industry into sheep rearing, spinning, weaving, dyeing, merchanting.

(iii) **Division of These Processes into Part-processes.** There is now specialization, for example, within the wool-spinning industry, according to whether the yarn is "woollen" or "worsted."

(iv) Territorial Division of Labour, or Localization of Industry. This is due to—

(*a*) Physical and climatic conditions—including mineral resources and natural means of transport.

(*b*) In a few instances, semi-political reasons; e.g. the settlement of foreign refugee craftsmen under protection, such as the Flemings and Huguenots.

These are original causes of localization, which becomes more established as a result of—

(*c*) Adaptation of means of transport and communication.

(*d*) Specialization of labour and capital.

(*e*) Rise of subsidiary industries.

(*f*) "*Industrial Inertia.*" An industry may continue in a particular district when the original cause has disappeared, for reasons of specialized labour and capital, reputation or "goodwill" of district, etc. The Potteries, for example, no longer depend mainly on local supplies of clay.

ADVANTAGES OF DIVISION OF LABOUR.

These may be shortly summarized—

(i) **Accruing to Industry generally**—

(*a*) Increased output.

(*b*) Superior quality of work, as a rule.

(*c*) Saving of time in workshops.

(*d*) Lower cost of production.

(*e*) Increased use of machinery.

(*f*) Economical use of machinery:

1. A complete set of tools is no longer necessary for each worker.

2. Delicate and expensive machinery is entrusted only to skilled men.

(*g*) Increased scope for invention.

(This is not necessarily the same as increased

inventiveness on the part of the worker, an advantage often put forward, but hardly compatible with the monotony and dullness sometimes inevitable—*see* below.)

(*h*) With localization of industry, there is a local supply of specialized labour.

(ii) **Accruing to Labour**—

(*a*) Increase of dexterity and skill through constant repetition.

(*b*) Saving of time in learning a trade.

(*c*) Diminution of physical strain (though this may be offset where the machine sets the pace).

(*d*) Opportunity and demand for organizing ability.

DISADVANTAGES AND LIMITS.

(i) **Disadvantages.** These fall mainly on the worker, but indirectly affect the whole of industry.

(*a*) Monotony and narrowing influence of the work.

(*b*) Specialization causes immobility of labour. (*See* below.)

In a few instances, the subdivided processes of one industry may resemble those of another (e.g. wool-spinning and cotton-spinning, or processes common to the making of clocks and typewriters) making possible a " flow " of labour from one group to another. But when industry as a whole is depressed, possible mobility counts for little.

(*c*) Loss of sense of responsibility.

(*d*) Disadvantages attributable to machinery. (*See* below.)

(*e*) Drawbacks of factory-life and overcrowded towns.

(*f*) Where the enterprise is on a large scale, the personal relationship between employer and employed is usually lost.

(*g*) If the industry is very localized, a depression in trade may cause more intense distress than if the industry were widespread.

(ii) **Limits to Division of Labour.**

(*a*) If the article has a very limited demand, it would not be economical to make fuller use of division of labour (except among those already employed, whose number might in consequence be diminished).

(*b*) Where the market is such that an increase in supply causes a considerable fall in price, it might not pay to add to the output.

(*c*) Similarly where " diminishing returns " set in, even after economies of subdivision. This will be considered further in the next chapter.

THE USES AND DRAWBACKS OF MACHINERY.

(i) **Advantages**—

(*a*) Relieves man of many heavy duties, some of which would be too burdensome for him working alone.

(*b*) Reduces the amount of drudgery by taking over some monotonous repetitive jobs (though monotony is created in other directions).

(*c*) Machinery works more quickly, and so yields a bigger output.

(*d*) Goods are produced more cheaply.

(*e*) Machinery is more accurate and regular.

(*f*) " Standardization " is made possible.

(*g*) The net result is more efficient and economical production.

(ii) **Disadvantages.** The following objections are not very fundamental, and are due largely to the abuse, rather than use, of machinery. Foresight and social pressure may do much to minimize them.

(*a*) Skilled craftsmen are reduced to, or replaced by, semi-skilled machine operators.

(*b*) Hand-work is said by some to be superior to, and more artistic than, machine-work. (This is not always true.)

(*c*) Where a man has to keep pace with a machine, there is a certain amount of strain.

(*d*) Introduction of machinery is alleged to be a cause of unemployment. This may be true in a short period, but in the long run machinery increases the output, reduces the price and stimulates further demand. The result may be more employment than before. (*See* "Machinery and Unemployment," Chapter XI, § 1.)

On the whole, it must be admitted that the uses of machinery far outweigh the drawbacks. Modern communities could not exist by hand labour alone.

MOBILITY AND IMMOBILITY OF LABOUR.

This refers to the ease or difficulty with which labour can "flow" from one direction to another. Labour is generally immobile rather than mobile, especially when compared with most forms of capital.

Immobility of labour may be classified as follows—

(i) **Economic Immobility**—

(*a*) *Horizontal*, between trade and trade, but in the same grade; e.g. a typist moving from a textile to a mining office.

(*b*) *Vertical*, from one grade or occupation to another, e.g. a typist becoming a milliner.

(ii) **Geographical Immobility**, i.e., from place to place. Home-ties, sentiment, ignorance of better conditions elsewhere, may all be responsible.

(iii) **Social Immobility.** Certain occupations are difficult to enter owing to social and wealth barriers, and, to a certain extent, to trade union restrictions.

Mobility of labour is usually more difficult among adults than youths, the latter being less " settled " and therefore more adaptable.

The comparative immobility of labour is very important in considering the problems of wages and unemployment. It is much simpler to bring about a " flow " in (*ia*) and (ii) than in the others. Employment exchanges can only hope to tackle successfully horizontal and geographical immobility. Vertical immobility is bound up with the subdivision of labour, and involves more fundamental action and remedy.

The subject is resumed in the sections on the inequality of wages in different trades and on unemployment. (Chapters VIII, § 2, and XI, § 1.)

CHAPTER III

LAND AND CAPITAL

Section 1

Land and the Laws of Non-proportional Returns

LAND.

"LAND" is the term used in economics to indicate the materials and forces supplied by Nature for use in production. It covers not only land in the ordinary sense, but such things as minerals, timber, brine, gases, etc., and natural forces, like tides, winds, and sunlight.

The Productivity of Land Depends on—

(i) *Physical Conditions*, such as fertility of soil, latitude, climate, mineral wealth, etc.

(ii) *Economic Application.* The yield may be improved through artificial manures, or irrigation, or even modification of climatic conditions. Also improvements in transport and communication may bring a place nearer, as it were, to the market, and so increase its net productivity.

Methods of Land Tenure—

(i) *Landlord and Tenant-farmer.* This system is the rule in Great Britain. Land is let and sub-let on long or short lease. The money rent is fixed for a period by agreement.

(ii) *Peasant Proprietorship and Cottier Tenure*—to be found in Belgium, France, and elsewhere. In France, about 40 per cent of the people are directly dependent on the land, and most of these are peasant proprietors.

(iii) *Métayer System*—to be found in Southern Europe. Here the landlord lends some capital with the land, and receives a return proportionate to the produce, usually a half.

(iv) *Ryot Tenure*—as in India. The owner-cultivator pays a fixed proportion of the produce to the Government.

Methods of Land Cultivation. Farming is said to be *Extensive* when the cultivator works over a large area of land, as in the new countries, finding it more profitable to cover as many acres as possible, in a comparatively superficial way, than to try and get every possible pound of produce from a more limited area.

In thickly-populated countries where land is dearer, farming tends to become *Intensive*, which means that the limited piece of land now available is worked more thoroughly and scientifically so as to obtain a higher yield. The distinction is of importance in discussing the rent of land. (Chapter X.)

Extensive farming is not necessarily the same as large-scale farming, nor intensive necessarily the same as small-scale farming.

THE LAW OF DIMINISHING RETURNS.

The Law of Diminishing Returns states that **after a certain point, an increase in the capital and labour applied to production causes a less than proportionate increase in the amount of the product.**

It may be otherwise stated as the **Law of Increasing Costs** per unit produced.

Suppose that a farmer has applied £700 worth of capital and labour to his land, and finds that the 7th dose of £100 yields a smaller return than the 6th, say, a product of £130 as compared with £140. He is thus experiencing diminishing returns, but he will not necessarily cease investing as soon as the additional yield

per dose begins to fall. He will only stop applying capital and labour when the return falls below the minimum deemed necessary to carry on.

It is essential to note that the " doses " of capital and labour which yield diminishing returns need not necessarily be *consecutive* in order of application. They may be applied *simultaneously*, and still show the same result.

Thus, 10s. worth of capital and labour applied to a field every day for a week may yield a smaller extra return for the 6th application than for the 4th. Similarly, £3 worth of capital and labour applied *at a time* may not yield six times as much as if only 10s. were applied. In the same way, a farmer taking on men may find that the 10th worker employed yields less than the 9th man, working at the same time, though the ability and efforts of the employees are equal. Diminishing returns, therefore, are not necessarily a matter of time.

THE LAWS OF INCREASING AND CONSTANT RETURNS.

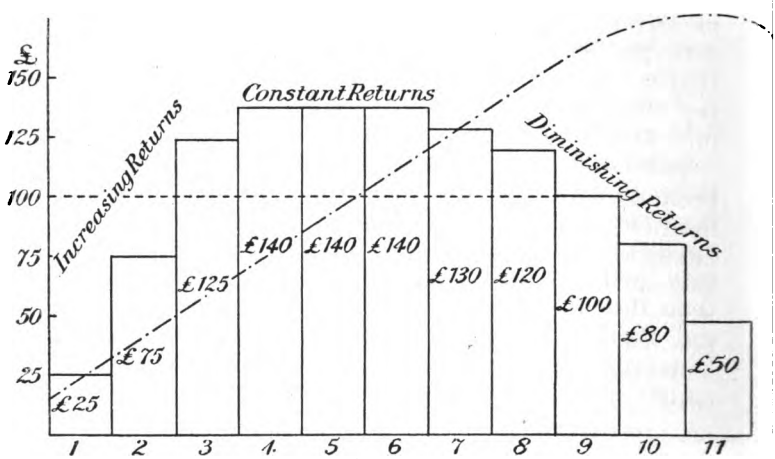
The Law of Increasing Returns states that **after a certain point, an increase in the capital and labour applied to production causes a more than proportionate increase in the amount of product.**

The Law of Constant Returns is similarly stated, except that the word *constant* is substituted for " more than proportionate."

They may be otherwise termed the **Laws of Diminishing and Constant Costs.**

The example taken above started with the farmer's 6th dose. He may have found on commencing to invest, however, that the first dose of £100 had to be

spent on preliminaries with very little yield, (say) £25. The 2nd £100 may have produced £75, the 3rd-£125, the 4th-£140, the 5th-£140, and the 6th-£140 (stage reached above).



Each rectangle represents the product of £100 application. Doses 1 to 4 yield increasing returns; 5 and 6 a return constant with 4; 7, 8, 9, etc., diminishing returns. It is obvious that the farmer will stop applying capital and labour after the 9th dose, for his return will be less than the outlay. He may stop before the 9th if exact calculation is possible. The "marginal" dose is that which just pays for itself, leaving no surplus.

The dotted line denotes the returns to a constructive industry which has a longer period of increasing returns or diminishing costs.

In such an instance, the farmer would have experienced increasing returns up to the 4th dose, constant returns from that to the 6th dose, and diminishing returns afterwards.

THE LAWS OF RETURNS IN EXTRACTIVE AND CONSTRUCTIVE INDUSTRIES.

In agriculture, particularly, does the Law of Diminishing Returns evidence itself, for the amount of land available is comparatively fixed. By modern methods of fertilization, scientific rotation, and improvements generally, the operation of the law is made less ominous than when Malthus wrote (*see* above, Chap. II, § 1), but the tendency is ever present. The period of increasing returns is relatively short.

In constructive industry, on the other hand, the producer has more scope. His resources are not so limited in supply and, by a proper arrangement of the labour and capital goods at his disposal, he may enjoy a long period of increasing returns. Thus, in the manufacture of motor cars, the cost per car of the first batch would be very high, as the heavy preliminary and standing expenses would be distributed over a small number of units only. As the number of cars produced increases, the cost of each diminishes.

The co-ordination and selection of the different factors of production, in such proportions as to get the maximum return, is in accordance with the **Principle of Substitution,** which applies to all spheres of economic production and consumption.

It may be stated as a general rule that *diminishing returns tend to operate more in extractive than in constructive occupations, and that increasing returns prevail more in constructive than in extractive occupations.* The economies of large-scale enterprise are all indicated in the term " increasing returns." *After a certain point,* in whatever industry, the Law of Diminishing Returns always tends to operate, and man has constantly to use his ingenuity to offset this ever-threatening tendency.

In the matter of *advertising*, the laws of returns are very important. If a man is producing under increasing returns, it may pay him to spend money on advertising and create extra demand, thus allowing of increasing his supply at diminishing cost per unit. The cost of advertising under such conditions need not be included in the price of the article (though this cannot be said of all advertisements and prices). On the other hand, advertising something produced under diminishing returns or increasing costs might result in loss to the seller and public alike.

The size of a business will be largely influenced by the nature of the returns. Since the large farmer in competition with the small farmer, reaches diminishing returns sooner than the large manufacturer in competition with the small manufacturer—in other words, as the manufacturer is better able to secure the economies of large-scale enterprise—it is more difficult to squeeze out the small farmer than the small manufacturer.

Thus the tendency is for large enterprise to be more common in manufacture than agriculture, and for the " small man " to be more prevalent in agriculture than in manufacture.

Section 2. Capital

THE NATURE OF CAPITAL.

Capital is wealth set aside for the production of further wealth. It has been observed in a previous chapter that, in early times, when one lived from hand to mouth, capital was comparatively unimportant. Labour was direct and for the satisfaction usually of one's own needs, while the necessary reserves were of small dimensions. With the growing variety of, and

demand for, goods, production became more indirect and drawn-out. This involved the ever-increasing use of capital in such forms as tools, machinery, stock, etc. With the Industrial Revolution, the need for capital grew considerably. As England changed from an agricultural to an industrial country, the power was transferred largely from the landed proprietors to the new capitalist magnates.

While capital is necessarily wealth, wealth is not necessarily capital (e.g. a tennis racquet—unless used by a professional player). Capital is only that portion of wealth that is definitely put aside to assist in further production, not for immediate personal consumption.

The Two Conceptions of Capital.

The failure to grasp the important distinction between the terms "capital" and "capitalist" is responsible for much of the haranguing over the subject. The two conceptions of capital, therefore, should be clearly distinguished.

(i) **As an Agent of Production.** This is the conception concerning us at present, which we may call its *natural characteristic.* The problem of the *ownership* of, and derivation of interest from, capital is of great practical importance, but does not affect the essential nature of capital as an agent. As such, it is indispensable in any form of industrial organization, whether individualist or collectivist. Socialists do not dispute its importance as a material requisite of production. Their objection is really to capitalism as implied in the second conception—

(ii) **As a Source of Income Without Direct Effort.** This may be termed its *acquired characteristic.* On this point there is, of course, acute difference of opinion. The Socialist claims that all capital is the result of past

labour (" crystallized labour "), and that the extra product due to the use of capital should accrue to the whole community. He urges, therefore, not the destruction, but the social ownership and control, of capital. The critics of Socialism contend, on the contrary, that without capital held as private property there would be insufficient saved for future production.

THE FORMATION OF CAPITAL.

It has been seen that while land and labour are fundamental agents of production, capital is secondary both in its evolution and in its importance. Land is a *natural* factor, while capital is a *produced* factor.

Capital is the result of past saving. One of the tasks of a Socialist commonwealth would be to ensure that sufficient wealth is kept back from immediate consumption. In times of very high taxation, too, there is the danger that insufficient reserve will be put aside.

" Abstinence " is the word that used commonly to be applied to saving, but this word may be taken to imply a certain " sacrifice " of present satisfactions. As there are people who have sufficient income to be able to save without experiencing this element of " pain," the term " waiting " is now preferred.

The formation of capital depends on both the power and the will to save. The *power to save* is governed largely by the existence, if any, of an excess of wealth over the necessary consumption ; also by the efficiency of the joint-stock and banking systems for " collecting " relatively small amounts of capital, and putting the total to more productive use. The *will to save* is influenced by the preference for future over present satisfactions, the security of the times and the anticipated revenue from savings.

FORMS OF CAPITAL.

The different ways of classifying capital are tabulated below. It should be borne in mind that the classes are not mutually exclusive of each other, and that a certain amount of overlapping is inevitable.

Kind.	Remarks.
Fixed and Circulating	Fixed capital is that which exists in durable shape, and is used repeatedly, e.g. machinery, ships, office furniture. Circulating capital is that which fulfils its function in one use, e.g. nails, seeds, writing paper.
Sunk and Floating.	Capital is " Sunk " when it is highly specialized in form, and cannot be adapted to other use, e.g. power-loom, pit-shaft. Floating capital is that which is not specialized, and can be adapted to different uses, e.g. money, coal.
Individual and Social.	Individual capital is a private possession as distinct from such forms of capital as the telephone system, roads, etc., which are socially owned.
Material and Personal	Material capital is that which has a concrete form, and the ownership of which is transferable, e.g. a singer's piano. Personal capital, on the other hand, is the purely personal ability, in the training of which some wealth may have been invested, e.g. a singer's voice.
Remuneratory and Auxiliary	The first is the capital used for paying of wages ; the second that used for machinery, material, etc. Different occupations involve different proportions of each ; *cf.* a solicitor and a boot manufacturer.

CHAPTER IV

ORGANIZATION AND ENTERPRISE

Section 1. *Economic Organization*

ORGANIZATION AND THE ENTREPRENEUR.

ORGANIZATION of industry is not as definite or easily definable as the agents of production previously discussed, and it is still a matter of opinion whether it should be considered as a branch of labour rather than as a distinct factor to itself. But, however regarded, its importance in modern industry and commerce demands separate treatment.

Fundamental to industrial organization is the *division of labour*, not merely the specialization of individuals but of large occupational groups. In a workshop, skilful allocation and co-ordination of jobs increases the output, but economic organization is broader and deeper in nature than simple management, and is bound up with the very structure of society. (*See* Introduction, § 2.)

Enterprise may be regarded as apart from, or included in, organization. Most production is now carried on in anticipation of demand, and success or failure depends largely on the ability of the **Entrepreneur** (Fr. *entreprendre* = to undertake). He determines the nature and direction of the business, and arranges the resources available in such a way as to get the best return. The ideal entrepreneur is he who possesses foresight, the power of judgment, the knowledge when to take risk, and the ability to lead men and inspire confidence.

The difference in function between the entrepreneur and the capitalist should be noted. The former, in

theory, is concerned with organizing only, the latter with investing of capital. In practice, however, it is difficult often to draw a clear distinction, for a capitalist necessarily undertakes more or less risk, while the entrepreneur, as a rule, invests some capital. It is thus a difference of *function* rather than of individuals.

SPECULATION.

In ordinary language, the term " speculation " ranges from investment in anything below gilt-edge securities to sheer gambling. It covers—

(i) Ordinary business enterprise and risk.
(ii) Speculation proper.
(iii) Illegitimate speculation.

Of these, the first is quite legitimate and indispensable, the second also can be justified up to a point, but the third is indefensible from the social standpoint.

Ordinary Business Enterprise and Risk. People produce nowadays mainly on an estimate of what is likely to be demanded. One of the most important duties of the entrepreneur is to initiate production and co-ordinate it with anticipated needs.

Speculation Proper. A dealer may foresee a shortage in the supply of a particular commodity and, expecting prices to rise in consequence, buys now in the hope of selling later at a profit. Increased demand may lead to higher prices *now*, with resultant falling-off in consumption. Hence, present stocks will not be exhausted when the new supplies arrive, making the total future supplies more plentiful than the dealer had anticipated. The new price, therefore, will not be as high as if some of the old stock had not been conserved.

Similarly, a dealer who foresees a glut in supply and consequent fall in price, may contract to sell at a future date at a price lower than the present level. This will

tend to bring prices down *now*, with resultant increase in consumption. When the plentiful supplies arrive, the old stocks may be so exhausted that there will be a bigger demand for the new supplies than was anticipated. The price, therefore, will not fall to the level expected. Here, again, speculation helps to regulate production and consumption, and tends to " level out " fluctuations in prices.

The same applies, in a measure, to dealings in " futures," as in the cotton and wheat markets.[1]

This form of speculation is justifiable, therefore, in so far as the dealer is an expert in his market, and can accurately predict supply and price tendencies. Mistakes in forecasting, however, will mislead others and only accentuate fluctuations.

Illegitimate Speculation. This is very akin to gambling, and the big profits that are sometimes made carry with them no corresponding economic service to the community. Speculating on insufficient capital, or blind dealings by outsiders who are ignorant of the market, are forms of illegitimate speculation; but unquestionably the worst kind is the deliberate manipulating of market conditions with a view to profit. This is done by such methods as spreading untrue reports, or by *" bull " and " bear " operations.* Such operations occur usually, though not necessarily, in dealings in securities.

In a " bull " operation, the manipulators begin by buying in such quantities as both to force the price up and to give other people the impression that they are " on a good thing " if *they* buy. When a suitable stage is reached, the " bulls " gradually begin to unload their

[1] Speculation in the stock and share market does not necessarily have the same beneficial results as legitimate speculation in the *produce* markets.

stocks, at a figure considerably higher than the original purchase price, and (if they have been lucky) emerge from the operation with a handsome profit.

In a "bear" operation, on the other hand, the operators begin by selling in order to depress prices, and follow this up by buying back at figures below those at which they sold.

These operations are made still more of a gamble when the principals in a "bull" operation have not the cash to pay now, or even the certainty of it in the future, but promise future payment presumably out of the expected receipts of this transaction; similarly, when the "bear" operators contract to deliver something which they have not yet in hand or even promised, but hope that out of the receipts they will be able to purchase and deliver it by settling-day.

It is not unusual for such people to get "bitten."

INSURANCE AGAINST RISK.

A very important element in modern industry and trade is the machinery for insuring against risk. The principle of insurance is simply that the uncertainties among the few are "levelled out" among the many. It is not known, for example, whether any particular building is likely to be burned down; but actuarial experts, basing their estimates on past statistics, can predict fairly accurately the likely number of fires under certain conditions in a given period, and calculate the "premium" accordingly. The risk of loss is sometimes spread over a still larger number of people by one insurance company insuring with another.

The practice of insuring has been extended in almost every direction. The possibility of war, of a change in political conditions, of unfavourable weather, etc., can all be insured against. A company promoter often

has the issue of shares " underwritten," so that in the event of their not being taken up by the public, he will be assured of a certain amount of capital.

LARGE AND SMALL BUSINESSES.

Large-scale production is, of course, the keynote of modern industry, though it would be too soon to say that small concerns have lost their importance altogether. Referring to the notes on " Occupational Groupings " (Chapter II, § 2), one finds that while large-scale production is the typical unit of " constructive " and " commercial " enterprise, small-scale concerns are still fairly common in the " extractive " industries, not to speak of those who afford individual and direct services to the consumer.

The Size of a Business will be largely determined by—

(i) Nature of the industry. There is more scope for large-scale enterprise in constructive and commercial concerns than in extractive industries. This is accounted for partly by the *operation of increasing or diminishing returns* as the business grows (Chapter III, § 1). In extractive industries, diminishing returns tend to appear fairly soon, thus limiting the economical extension of the business.

(ii) Nature of the market. If the demand is seasonal or spasmodic, or subject to serious fluctuation, there is little opportunity for successful expansion.

(iii) Ability and enterprise of the employer.

(iv) Amount of capital available for expansion.

ADVANTAGES AND DISADVANTAGES OF LARGE- AND SMALL-SCALE PRODUCTION.

(i) **Advantages of Large-scale Production.**

(*a*) Economies of large purchases and sales.

(*b*) Advantages of efficient division of labour (Chapter IV, § 1).

(*c*) Economy of material.

(*d*) Utilization of by-products.

(*e*) Fixed expenses spread over large turnover (e.g. rates, insurance).

(*f*) Ability to spend money on advertising, experiment and research.

(*g*) Trade "ups and downs" can be better countered.

(*h*) Continuity of production without wasteful intervals.

(ii) **Advantages of Small-scale Production.**

(*a*) Personal interest and supervision.

(*b*) More regard for detail.

(*c*) Knowledge of customers and ability to suit individual needs.

(*d*) Direct contact between employer and employed.

(iii) The **Drawbacks** of the one kind are, of course, largely correlative with the advantages of the other, but the following special disadvantages of large-scale enterprise may be added—

(*a*) Failure of large businesses often entails loss for others.

(*b*) A highly specialized large concern finds more difficulty than a small firm in changing the nature of its structure, or the direction of its effort, to meet altered circumstances.

(*c*) Tendency to the formation of monopolies.

JOINT-STOCK ENTERPRISE.

The principle of joint-stock was understood and carried out in practice as far back as the sixteenth century, but it was only during the nineteenth century that company-formation became really prevalent and sound.

Before the Industrial Revolution there was comparatively little need for large amounts of capital; production was simple, and few long periods of waiting elapsed between the first stages of production and the sale of the commodity; while agriculture, which was then the main occupation of the people, necessitated little financial outlay. What money was required could, as a rule, be supplied by one man or a small partnership.

After the Industrial Revolution, large capital investment became indispensable and it was found increasingly difficult to find small groups of men who were able or willing to lay down the necessary sums. The practice of company-formation was resorted to in increasing measure; without such an organization the construction of the canals and, later, the railways, would have been seriously impeded.

A drawback of early joint-stock was that the liability of the shareholder was unlimited, and there was the danger, about the middle of the nineteenth century, that the supply of capital would run short of the demand. This danger was met by legislation, which established the principle of limited liability. This was followed by a "boom" in company formation, and the number of corporations since then has steadily increased. At the present time there are about 60,000 registered companies in Great Britain.

General Results.

(i) Increase in size and scope of business.
(ii) Power of large capital control.
(iii) Growth of impersonal element in business.
(iv) Division of function between the ownership and control of capital.
(v) Free transferability of shares.
(vi) Spread-over of liability and risk of loss.

(vii) Ability of people with relatively small means to take part in enterprise; possibly more productive use made of their capital.

Section 2. Combination and Monopoly.

THE TENDENCY TO MONOPOLY.

The nineteenth century was a period of intense competition. Under the new industrial *régime*, manufacturers tended to take full advantage of the increasing returns accruing to large-scale enterprise. As the costs of production per unit diminished, the prices to the public were cut and undercut, until, in certain industries, only the firms producing in great quantities could sell their products at a profit.

As the size of these businesses increased, the rivalry between them was emphasized. Firms were either crushed or absorbed by the new mammoth enterprises until comparatively few concerns were left in the field. Competition now became so intense that it was often an alternative of still further combination or ruin. From this state of affairs emerged the **Trust**, which suppressed suicidal competition and controlled production and price.

The principle of joint-stock and free-transferability of shares was of great assistance in the formation of these monopolies. A firm need only, as a rule, acquire a majority of the shares of a rival concern to obtain virtual control of policy and output. It was thus a cheaper way than buying a business outright for its full cash value.

The Standard Oil Company in America was the first of the big trusts. A number of oil firms, after a period of severe competition, united their interests, and transferred the control to a few "trustees," thus naming the new organization.

While the trust is the typical form of monopoly in the United States, and, to a certain extent, in England, the **Cartel** is the type of organization in Germany, which is the principal other country where monopoly has seriously developed. The main difference between the two forms of monopolist organization is that whereas the trust is an actual *amalgamation* of firms, with single control, the cartel is rather a *federation* of semi-independent concerns who dispose of their product exclusively through a central sales agency. In both cases, control of the market is aimed at and secured.

The distinction in structure between the trust and cartel is partly due to the difference in the Common Law in the English-speaking countries and Germany. A contract that would be "in restraint of trade" according to English legal principles is quite enforceable in Germany. There, two firms may contract not to sell more than so much produce, or at less than an agreed price. If one party broke its bond, the other could sue it for breach of contract and obtain damages. In the United States and this country, on the contrary, the law is opposed to agreements in restraint of trade. Such contracts, while not necessarily illegal, are not held in favour. A surer way of obtaining monopoly had, therefore, to be devised, and this was effected by bringing the firms into a single corporation, with central direction and control. The trust is thus more unified than the cartel, though the latter, in its own country, may be just as effective.

KINDS OF MONOPOLIES.

Monopolies may be Classified as follows—

(i) *Natural monopolies*, arising from limitation of Nature's supply.

(ii) *State-granted monopolies.* These may take the form of patent rights, copyright, trade marks, etc. ; or they may be due to the practical recognition of (iii).

(iii) *Monopolies in certain industries that are the necessary result of economic organization,* if full efficiency is to be obtained. It would be wasteful to have competing enterprises in gas, electricity and water supply, tramways, postal services, etc. In such instances, the State or municipality insists (or should insist) on single direction, by either taking over the service itself or granting sole privilege to a limited number of concerns, reserving the right of final control. Monopolies of this class are usually more permanent than (iv).

(iv) *Monopolies that are the result of industrial combination brought about to eliminate competition, but not necessarily for purposes of efficiency.* A trust is formed, as a rule, with the object of keeping competitors out of the field, though the incursion of the latter might be for the good of the community. It is this form of monopoly which meets with the severest criticism.

(v) *Temporary monopolies,* such as " cornering " of supplies. This, too, is generally condemned.

FORMS OF INDUSTRIAL COMBINATION.

The principal types of industrial association and combination are—

(i) Agreement to fix price.

(ii) Division of selling-field.

(iii) The Pool, i.e. profits pooled and divided in proportion.

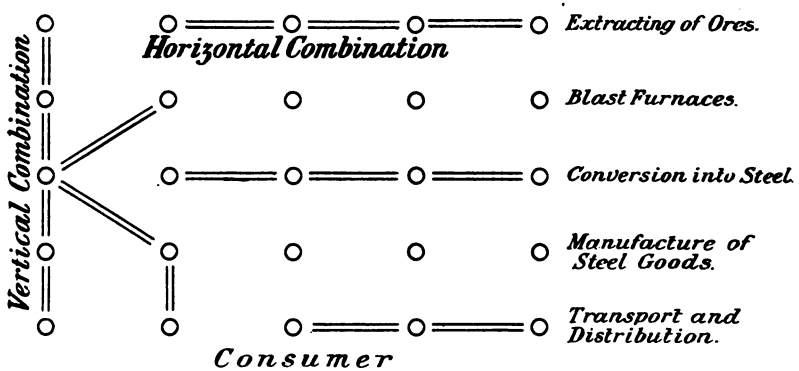
(iv) The Cartel.

(v) The Trust.

(vi) The Holding Corporation, i.e. a nominally independent company, which holds a major proportion of shares in the other companies, so obtaining virtual control.

(vii) The Merger; the principal company buys in and cancels stock of other companies which thereby cease to exist.

"Horizontal" and "Vertical" Combination. Combination is said to be *horizontal* when the firms involved have been engaged in producing or selling similar things,



In this diagram, each circle represents a firm engaged at one stage or other in the production of a commodity. Horizontal and vertical combinations are indicated.

Obviously, the most effective form of monopolist organization would be a combination of the two combinations.

e.g. combination of a number of iron smelters. They unite for the purpose of getting—

(i) Lower prices from the firms who supply their material;

(ii) Higher prices from their customers.

Combination is said to be *vertical* when the firms have been engaged *at different stages* in the production of an

article. The motive may be efficiency of production apart from monopoly. Vertical combination in the iron and steel industry, for example, allows of the metal going through several stages without cooling. Vertical combination alone may merely be a stage in large-scale production; though it is not necessarily monopolist, however, it may be a step in that direction.

ADVANTAGES OF MONOPOLIES.

The advantages can be regarded from either the social or the trust's point of view. From the latter viewpoint, the advantages are obviously greater control of the market and higher profits. From that of the public, the advantages are by no means in great evidence, although some of the economies of the trust might indirectly be for the general good.

The General Advantages are to a large extent the same as those of any large-scale enterprise (*q.v.*).

The following can be added—

(i) *Concentration of Production in the Best Equipped Factories.* Though the formation of a trust may be accompanied by the closing-down of some works, it is, as a rule, only the inferior ones that are so affected.

(ii) *Regular Instead of Intermittent Production.* If there were too many factories prior to the combination, regular working of them all would have meant "overproduction." It is more economical to have fewer works producing all the year round than several intermittently. This also leads to regular and ready supply.

(iii) *Economy of Freights.* Under a system of competition, factory A might send goods a long distance to within a short distance of factory B, which is producing the same kind of commodity, while B might send to a place near A. These "cross-freights" are very uneconomical, and are eliminated under single control,

each factory being instructed to supply the nearest market.

(iv) *Patent Rights, Special Brands, and Trade Marks* of particular firms can be utilized by all the members of the trust.

(v) *Costs of Advertising* are considerably reduced. The money spent in advertising to capture a competitor's trade will thus be saved. This is also advantageous from the public's point of view.

(vi) *Reduction in Number of Salesmen and Travellers.* Though the dismissal of these men might mean hardship, it is comparable to that caused by the introduction of machinery, which in the long run is for the general good.

DRAWBACKS OF MONOPOLIES.

(i) *Prices Usually Raised.* The cut-throat competition often preceding combination means, as a rule, low prices for the consumer, which are promptly raised when an amalgamation or " understanding " is reached. While the consumer recognizes that very low competitive prices (sometimes below cost of production) are " unhealthy," he resents having to pay unfairly inflated charges. It is important to note, however, that a monopolist will not *necessarily* charge a high price, if this means a small demand. Everything depends upon the nature of the article, the elasticity of the demand, and also upon the possibility of a substitute. It may yield a higher net profit to sell a large quantity at a low price than to sell a little at a high price. (*See* " Monopoly Prices," Chapter VI, § 2.)

(ii) *Unfair Methods of Competition.* This is the chief criticism of the trusts, which have attempted to cut out competitors by such means as selling under cost of production for a time until the rival is beaten,

discriminating prices,[1] secret rebates on freights and purchases, deferred and provisional rebates to customers to secure monopoly of trade, the boycott, etc.

(iii) *Unemployment* caused through the discharge of factory hands, salesmen, travellers, etc. (This is not a disadvantage in the long run, if there have been too many firms producing.)

(iv) *Speculation and Over-Capitalization* made possible on the formation of trusts.

(v) *Killing of Enterprise.* This allegation is not always well founded, especially when it is noted that trusts still keep up the emulative spirit in the works and on the distributive side by such means as bonus schemes, competitive selection for higher posts, etc. The trust kills competition as far as the consumer is concerned, but retains it in the internal organization.

Attempted Remedies.

Various attempts have been made in different countries to prevent or minimize the abuses associated with trusts, particularly the unfair methods of competition. In the United States, where the trust has most developed, much legislation has been passed to reduce the evil, but evasion so far has not been over-difficult. An attempt was made there to split the amalgamation into its component parts, but with the nominal breaking-up there emerged the "holding corporation," a super-company which held all, or a majority of, the shares of the subsidiary companies, thus exercising a control as strong

[1] Coal as a rule is cheap at the pit-head and dearer as one moves away, according to the cost of transport. When the Westphalian Coal Cartel was formed, however, the reverse was the result. Coal was now dearest at the pit-head, and cheapest about mid-way between the pit and the next coal area. People near the pit-head who would not buy the coal produced locally, would have to pay very heavy transport costs to have it brought from another area.

as that of the original " trustees." Attempts to prevent the practice of discriminating prices were countered by special " fighting brands " which had only one price, but whose sale was restricted to areas where a rival was in the field. In devising schemes to remove the trust evil, care must be taken not to interfere with those economies that are the natural result of efficient organization.[1]

TRUSTS AND THE FUTURE.

There is much diversity of opinion on the future of the trust. Strange as it may seem at first, the trust is not entirely disapproved of by a certain section of Socialist thinkers—the " evolutionary school." While condemning the motives and methods of the monopolist, they regard industrial combination as an important stage in the development of society. They maintain that industry will become increasingly concentrated and at the same time simplified, and will thus facilitate the eventual transference of industrial control from private to public ownership. They regard the " capitalist " epoch as the " growing pains of society."

On the other hand, it should be noted that, while the capital-*control* may be getting into fewer hands, the number of capital-*owners* (i.e. shareholders and others) is increasing every year. Further, the " small " firms do not appear to be dwindling as quickly as Marx and his followers suggest. In certain trades where personal attention to individual tastes is desirable, the

[1] As monopolies in this country have not reached the same stage as in the United States, comparatively little has been done to check their powers. The Ministry of Reconstruction appointed a Committee in 1918 to inquire into the position of Trusts in the United Kingdom. The Report, containing an excellent analysis of the situation, is well worth studying. (Cd. 9236, reprinted 1922, 1s.)

"small" man has a distinct advantage over the trust. In agriculture, also, he is predominant. No accurate statistics are available for this country, but in the United States and Germany the number of "small" producers is slightly increasing.

PART II

VALUE

CHAPTER V

THE THEORY OF VALUE

Section 1

The Labour and Cost of Production Theories

THE NATURE OF EXCHANGE.

IN the foregoing analysis, it was pointed out that production was nothing else than the creation of utilities, which might be of various kinds. Any man who added a utility was a producer. Shopkeepers and bankers may add nothing tangible to the goods they help to distribute, but their services are indispensable. The utility they add is not one of form, but of time or place.

It used to be contended that if one man benefited by exchange, another man must necessarily lose. This idea is no longer believed in. It is now held that if A exchanges, say, his watch for B's cycle, A values the cycle *at least* as much as the watch, while B values the watch *at least* as much as the cycle. Both parties may gain by the transaction, proving the adage "exchange is no robbery." Similarly, in the use of money, the utility of the thing bought is not less than that of the money given. Exchange is the "barter of the comparatively superfluous for the comparatively necessary" (Jevons).

The most fundamental problem in exchange, and, indeed, in the whole of economic science, is the

consideration of the principles governing the exchange-power of a commodity or service. These principles are the subject-matter of this and the next chapter.

VALUE.

In ordinary speech, the term "value" is used in more than one sense (e.g. the value of food, of a suit of clothes, of fresh air, of literature, of stocks and shares, etc.); it is necessary to distinguish between a common and the strict economic interpretation of the term—

(i) Value in Use; (ii) Value in Exchange.

Value in Use is equivalent to utility, and is purely *subjective* in nature.

Value in Exchange is equivalent to the power of exchange that one commodity has for another, and is *objective* in nature. *This is the meaning of Value to the economist.*

Price indicates the value in exchange as measured in terms of money. The general theory of value must not be confused with the narrower theory of prices, which will be discussed later.

In the early days of exchange, goods were traded for goods, without resort to money. This was the system of barter. Later, there evolved the monetary system, which considerably facilitated the exchange of goods. But the principles of value or exchange-power are not affected by any alteration in the *mechanism* of exchange; they are more fundamental than money, which simply serves as a convenience and a help to exchange.

Before proceeding to examine the modern theory of value, one may consider the earlier theories, viz., the Labour and the Cost of Production Theories. The

Labour Theory is held by many at the present time, and its influence is too important to be disregarded.

THE LABOUR THEORY OF VALUE.

This theory was expounded at different times by Adam Smith, Ricardo, Rodbertus, and others; but it was left to Karl Marx to develop it most fully, and the theory is usually associated with his name.

Briefly, it states that the value of anything depends on the amount of labour embodied in it. Labour is the source and measure of all values. The theory does not exclude the influence and importance of capital goods (like machinery), which, regarded as the product of past effort, are termed "crystallized labour."

Marx and his followers used this doctrine as an argument against the capitalist organization of society. Labour, they maintained, creates all value, but is only paid a bare subsistence wage. The difference between the real product of labour and the wage paid is the "surplus value" which goes in the form of interest, profits and rent to the capitalist class.

It would be untrue to say (as it is sometimes stated) that Marx did not recognize that a thing must have utility or use-value before it can have exchange-power. He definitely admits of the necessity of utility, but, on account of its variability, rejects it as a cause of exchange-value. Adam Smith had pointed out nearly a century before that things with the greatest use-value often had a low exchange-value (e.g. water), while other things with low use-value might have high exchange-value (e.g. diamonds). This "paradox of value" only confirmed Marx in disregarding utility as a standard in fixing the exchange-value of a commodity.

By considering labour as the sole cause, Marx tries to explain exchange-value from the side of supply only.

His statement that the labour must be socially necessary is really a step towards the recognition of utility as a factor, but it does not go far enough. The modern theory of value allows for the influence of the supply side, while also stressing the importance of the demand side.

It should be carefully observed that the exponent of the Labour Theory does not merely say that, under better conditions of life, values would depend on labour. He says that labour is the source of *existing* values. This statement presents certain difficulties.

The Difficulties of the Labour Theory of Value may be summarized.

(i) It tries to explain value from the side of supply.

(ii) It offers no satisfactory explanation of what is to be the unit of labour taken for purposes of measuring values. How is the work of the mechanic, the clerk, the inventor, the author, the teacher, to be evaluated and compared? Marx in one place takes labour-time; in another, unskilled labour; elsewhere, "average" labour. Ultimately he takes the socially necessary or "simple abstract human labour" as the standard. But he fails to explain why an hour of one class of labour is reckoned as twice as much as another. If it be answered that the economic service is twice as great, it is only saying that the community derives a bigger utility from one than the other. And Marx rejects utility.

(iii) It does not explain the "paradox of value," whereby things with relatively little usefulness may have high exchange-values, and *vice versa.*

(iv) It does not explain changes in value *after* a thing is made, e.g. houses may appreciate or depreciate in value according to whether the neighbourhood becomes fashionable or decays.

(v) It does not explain " scarcity values," such as the high figures put on first editions, masterpieces, etc.

THE COST OF PRODUCTION THEORY.

This theory states that the cost of production governs the exchange value of a commodity. Like the labour theory, it argues from the side of supply; different from that theory, it allows for the agents of production other than labour. Under free competition, the theory appears at first to be a sound statement, since high profits will attract competitors, who will add to the supply and reduce the price; while low profits or a loss will drive producers out of the market, causing a shortage in supply and consequent high prices. Eventually the price will equal the cost of production.

When it was pointed out that the costs of production vary from firm to firm, the theory was adapted in accordance, and in its new form stated that value depends on cost of production under the most disadvantageous conditions prevailing at a time. In other words, the " marginal " costs determine the exchange power of a commodity. (This is considered below at greater length.)

Summary of Criticism of Cost of Production Theory.

(i) It tries to explain value from side of supply.

(ii) It does not account for the " paradox of value."

(iii) It does not allow for misdirected application of the factors of production. A building may be constructed at great cost, and then be unused or scrapped, with little or no exchange-value.

(iv) It does not explain changes in value after a thing is made.

(v) It does not explain " scarcity value."

More detailed attention may now be given to the theory of value in its developed form.

Section 2. The Marginal Theory of Value

In the following analysis, value will be considered in turn from the sides of demand and supply. It will be shown that the " marginal utility " is the governing factor in demand, and that the " marginal cost of production " is the principal factor in supply. The point at which the marginal utility and the marginal cost of production coincide fixes the value.

THE LAW OF DIMINISHING UTILITY OR SATIABLE WANTS.

The Law of Diminishing Utility or Satiable Wants states that **the additional satisfaction that a person receives from an increase in the supply of anything that he has, diminishes with every unit that is added to the stock.** To put this another way, the utility of a thing increases at a slower rate than an increase in the stock.

A person who is hungry obtains considerable satisfaction from his first slice of bread. Though his hunger is not satisfied, the edge has been taken off, and he will probably derive less utility from the second than from the first.[1] In the same way a person who is sight-seeing, finds that the pleasure derived from view after view gradually declines, even though the sights are of equal interest in themselves. This tendency to diminishing satisfaction is apparent in all forms of consumption, and rests upon man's physical and mental nature. It is conceivable that the stock of a commodity might so increase that the utility of additional

[1] Though increasing utility up to a point is conceivable; e.g. if 3 yds. of cloth are necessary for a garment, a cut length of 2 yds. would have *less* than two-thirds the utility of 3 yds. An extra yard would thus afford increasing utility.

amounts might fall to nothing, or even below. When the stock is so big as to render an increase objectionable or a nuisance, *disutility* has set in.

It is very essential to note that the amount and quality of the successive units do not vary. Each slice of bread was identical, yet the first gave more satisfaction than the fourth. The fact that these units are interchangeable as regards quantity and quality is of considerable importance in discussing the determination of value.

Diminishing Utility as Applied to Money.

Money, like everything else, is subject to the law of diminishing utility. The first £5 note of a man's income spent on necessaries yields more utility than the tenth £5 note spent on a luxury. It is a truism that a rich man attaches less importance to a sovereign than a poor person. In the economist's terms, he derives less utility from it than a poor man, because presumably he has already spent (or is capable of spending) many sovereigns in procuring necessities, comforts, and luxuries, the utility of the money thus gradually diminishing. While the sovereign represents to him (say) an extra bottle of wine, providing relatively little utility, it may mean to a poorer man an extra pair of boots, possessing relatively great utility.

APPLICATIONS OF THE PRINCIPLE OF DIMINISHING UTILITY.

(i) **To the Distribution of Income.** Working on the principle of diminishing utility, social reformers urge that a more equitable distribution of the national income would, by itself alone, increase the total of satisfaction in a country. If a hundred pounds deducted from a rich man's income only means the deprival of

comparatively little utility, while the addition of that amount to a poorer man's income would increase the latter's satisfaction by more than the rich man has lost, methods should be devised, they say, to redistribute the national income on a more equitable basis. In short, it is possible to increase the national satisfaction without *necessarily* increasing the national production, though the latter ought probably to be increased in any case.

(ii) **To Taxation.** Recognition is made of the principle of diminishing utility in graduated scales of taxation for rich and poor. Suppose A and B to have incomes of £2,000 and £500 respectively. If the income were *proportionate*, say, 10 per cent, A would pay four times as much as B, viz., £200 compared with £50. But for reason of satiable wants, the loss of £200 to A would mean less sacrifice than one of £50 to B. Accordingly in the British income tax, *progressive* scales have been adopted (as opposed to simple proportionate ones), whereby the *percentage* of income taken by the State increases with the amount of the income. (The subject of taxation is considered in Chap. XX.)

MARGINAL UTILITY.

It has been seen that the utility of a thing diminishes with its supply. This does not imply, however, that a person will go on buying a commodity until the utility drops to zero; on the contrary, he will, consciously or unconsciously, be comparing with this utility the possible satisfaction to be derived from the consumption of *other* commodities. When the man mentioned above was very hungry, the utility of 2d. worth of bread was greater than 2d. worth of pastry. But when he has somewhat allayed his hunger, he may find that another 2d. expended would yield more satisfaction from pastry

than from bread, owing to the diminishing utility of the latter. The utility derived from that amount of bread which the consumer thinks it just worth while to purchase is called its **Marginal Utility.** The man is, as it were, on the margin of doubt whether he should purchase any more, or buy something else which will yield him at least the same utility for his money.

The marginal utility is not the lowest possible use that can be made of anything, but the utility of that amount which, in the opinion of the consumer, is just worth purchasing at a given price. The position of margin is not fixed, even for the same person; still less so, when there are several people, each of whom may exercise varying preferences, i.e. derive different utilities from the same thing. A fall in the price of a commodity may determine a man to put it to some inferior use not considered worth the expense before. Or an increase in a man's income will have the same effect, in that he will purchase more of the commodity. In both cases, the marginal utility of the article will fall. Conversely, a rise in the price or a fall in the income will bring about a rise in the margin.

In reality, of course, only one price is charged at a time for a commodity. Difference in prices according to variation in utility would be practically impossible. At any particular price there are some people who get the commodity for less than they are really prepared to give. On the other hand, there are some who will not purchase it, because they reckon the utility of the commodity as less than that of other things which they can buy at the same price. Thirdly, there is the intermediate class of person who considers that while he would not pay more, he is just prepared to purchase the commodity at the price charged. He is the **marginal purchaser.**

THE LAW OF SUBSTITUTION, INDIFFERENCE, OR EQUI-MARGINAL UTILITY.

This law states that **a consumer will so regulate his purchases that the marginal satisfactions derived from the different things will be equal.** In other words, he gets most satisfaction out of his expenditure when he is getting equi-marginal returns from all the things consumed. This may be illustrated by a simple example. Suppose a man, going on a long walk, is about to buy tobacco and chocolate, and wishes to spend 1s. on these to the best advantage. The respective utilities to be derived from successive twopennyworths of tobacco and chocolate are shown in the following table—

Pence.	Marginal Utility of Tobacco.	Total Utility of Tobacco.	Marginal Utility of Chocolate.	Total Utility of Chocolate.
2	10	10	8	8
4	9	19	7	15
6	7	26	5	20
8	6	32	4	24
10	4	36	3	27
12	3	39	2	29

1s. spent on tobacco yields 39 units of satisfaction. Total, 39

10d.	,,	tobacco	,,	36	,,	,,
2d.	,,	chocolate	,,	8	,,	,, Total, 44
8d.	,,	tobacco	,,	32	,,	,,
4d.	,,	chocolate	,,	15	,,	,, Total, 47
6d.	,,	tobacco	,,	26	,,	,,
6d.	,,	chocolate	,,	20	,,	,, Total, 46
4d.	,,	tobacco	,,	19	,,	,,
8d.	,,	chocolate	,,	24	,,	,, Total, 43
2d.	,,	tobacco	,,	10	,,	,,
10d.	,,	chocolate	,,	27	,,	,, Total, 37
1s.	,,	chocolate	,,	29	,,	,, Total, 29

If he wishes to get the maximum satisfaction for his outlay, and assuming it is possible to make precise calculation, he will spend 8d. on tobacco and 4d. on chocolate, for at this point he derives 47 units of satisfaction, the highest in the scale. Another 2d. on chocolate would mean the loss of 1 unit; another 2d. on tobacco would mean the loss of 3 units.

The *tendency* is for people to purchase such quantities of different commodities that the satisfactions at the margin are equal. It becomes a matter of *indifference*, as it were, whether they buy "a little more or less" of one commodity or another. To state this another way, the satisfactions to be derived at the margin can be *substituted* for each other with little or no loss to the total satisfaction.

MARGINAL UTILITY AND PRICE.

The inter-relation of the marginal utility and the price of a commodity is of first importance in economics, for on it largely depends the modern theory of the determination of values in exchange.

This may be illustrated by another example. Suppose a woman to be buying butter, which may be used for more than one purpose in the household, and for which, be it noted, there are possible substitutes. Let it be observed also that the woman is only one of thousands of purchasers, for whom, in a perfect market, there can be only one price at a time. Rather than go without butter, she would be willing to pay at a particular time—

4/–	for the	1st	pound
3/3	,,	2nd	,,
2/6	,,	3rd	,,
2/–	,,	4th	,,
1/6	,,	5th	,,

How many pounds of butter will she buy and at what

price? It is evident that if the price were 1s. 6d. per lb., she would buy 5 lbs.; if the price were 2s., she would buy 4 lbs.; if 2s. 6d., 3 lbs.; and so on.

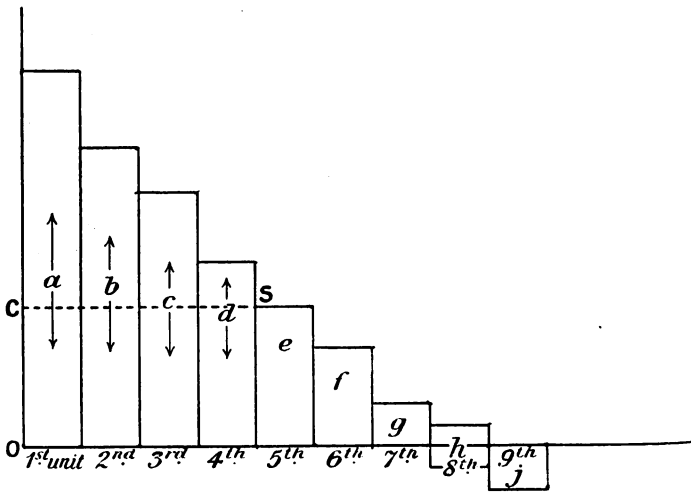
Assuming that the actual price were 2s. per lb., the marginal pound of butter would be the fourth. It is just worth buying 4 lbs. of butter at that price; to buy 5 lbs. would mean paying another 2s. for an extra 1s. 6d. worth of utility *Since the pounds of butter are identical and interchangeable, the marginal utility of the fourth pound is that of all the butter, and the price of the marginal pound of butter will be the price of all the butter purchased.* (Otherwise one would be paying different prices for the same thing according to varying utilities derived from it.) This means that **the price measures the marginal utility of the thing purchased.**

As the average purchaser aims at putting his money to the best use, and, consciously or otherwise, evaluates and compares the respective utilities of all the things he buys, it may be stated further that **prices of all commodities and services tend to equal the respective marginal utilities as measured in terms of money, and relatively to the marginal utility of money.**

Total Utility and Consumer's Surplus.

The woman who bought 4 lbs. of butter derived 4s. worth of utility from the first lb., 3s. 3d. from the second, 2s. 6d. from the third, and 2s. from the fourth, a total utility of 11s. 9d. Presumably she would have been prepared to pay this sum rather than go without the 4 lbs. But as shown above, she only paid 8s. for the 4 lbs. (i.e. four times the utility of the marginal pound, measured in money). The difference between the price that one would be willing to pay, and that which is actually charged, is termed "**Consumer's Surplus,**" here equivalent in terms of money to 3s. 9d.

DIAGRAM ILLUSTRATING DIMINISHING UTILITY, TOTAL AND MARGINAL UTILITY, AND CONSUMER'S SURPLUS



In this diagram rectangle *a* represents utility derived from the 1st unit of anything, *b* the utility from the 2nd, and so on.

The utility is seen to diminish, until the 8th unit *h* is on the border between utility and disutility. A 9th unit *j* would yield complete disutility.

Suppose the 5th unit is the one which the consumer just finds it worth while to purchase at the price; *e* will represent the marginal utility. The total utility will be $a + b + c + d + e$. The consumer's surplus will be the inclusive area above line *CS* parallel with *OX*, and may be represented as total utility *minus* $5 \times e$.

DETERMINATION OF MARGIN FOR CONSUMERS IN GENERAL.

Again reverting to the example above, it was seen that the woman derived 11s. 9d. worth of utility from an outlay of 8s. It might be asked, why was she not charged (say) 2s. 11d. per lb., seeing that she would still be getting 11s. 9d. worth of satisfaction for 11s. 8d. ?

The answer has already been given, but may be repeated in brief form—

(i) If the price were 2s. 11d., the woman in question would not buy the third and fourth pounds, which only represent 2s. 6d. and 2s. worth of utility respectively.

(ii) She is only one of thousands of purchasers, each having varying preferences. Some would pay more, some less, than the woman in our example. A different price for everyone would mean chaos.

(iii) The object of butter makers is not necessarily to sell at the highest price (this may mean small demand) or to sell as much as possible (this may mean a serious fall in price), but to sell at such a figure which yields the biggest profit. Selling large quantities of butter at 2s. per lb. might yield greater profit than selling smaller quantities at 2s. 11d.

COST OF PRODUCTION.

It is obvious that the normal supply price of a commodity is not going to be below the cost of production, or rather, since the conditions might change between making and selling, the *cost of reproduction.*

Though a line is sometimes drawn between the *cost* of production, meaning the amount of labour, capital, etc., used, and the *expenses* of production, signifying the sum of money spent on wages, interest, etc., the distinction is not of much importance in the present connection. [1]

Total cost of production is made up of *prime costs* and *supplementary costs.* By prime cost is meant the specific expenditure on the product in the way of material, labour, etc., but excluding the general establishment costs of the factory. The prime costs stop when a factory stops. Supplementary costs, on the

[1] But *see* pp. 96–97.

contrary, are regular establishment charges, like rent, taxes, etc., which go on being incurred whether the factory is running or not.

The importance of the distinction is seen in times of falling prices. A manufacturer with large supplementary costs is not so ready to stop producing as one with low supplementary charges, and may be willing for a while to produce for the price of labour and material only.

THEORY OF SUPPLY PRICES.

To say that the cost of production governs the supply price, however, is somewhat vague, as there may be several firms producing the identical commodity at varying costs, according to the different standards of organization and efficiency. Which firm's cost is the determining factor? The answer is the *marginal firm*, i.e. the firm which just manages to pay its way. (Of course, there may be more than one such firm on the margin.) Its costs are higher than those of other firms producing at the same time, but as the demand is sufficient to absorb the total output of all the existing firms at a price equivalent to the costs of the marginal firm (including cost of selling, and a minimum profit without which one would not normally carry on), these costs will tend to equal the supply price of all the firms. While some of the "super-marginal" firms *could* sell for less if they wished (since their costs are lower than those of the marginal firm), they will not do so because they are able to sell all their output at the higher price. Though a firm will not sell at a price below its cost of production, it will charge as much above as it can get. The marginal cost of production applies not only to the marginal producer, but also the marginal output of any producer.

It follows from what has been said that there is a "producer's surplus" comparable to the "consumer's surplus." More will be said about these surpluses in the chapters on Distribution and Taxation.

THE LAW OF SUBSTITUTION, INDIFFERENCE, OR EQUI-MARGINAL RETURNS.

It was shown above that a consumer tends to lay out his expenditure in such a way that the marginal utilities of all the things purchased are equal. In the same way, **a producer tends to employ the factors of production in such proportions that the marginal returns from each are equal.** If a sum of money is about to be added to a business, and can be spent in the form of new plant or more labour, or both, the entrepreneur will apportion the expenditure in such a way as to get the maximum gross return, and this will be done when the marginal returns are equal.

It may be asked why those super-marginal firms mentioned above do not increase their output and make extra profits. The reason may be that they are already near the limit of economical production. (*See* "Diminishing and Increasing Returns," Chapter III, § 1.) **A firm tends to produce up to the point where the marginal costs equal price.** Production after this point would mean adding more to the costs than to the receipts. Suppose, however, that the output of these firms is capable of profitable expansion, and the directors decide to increase their sales. In order to capture the market, they will, presumably, reduce the price. The result will be that the firm which had been marginal will now have to close down, for the price obtainable is less than its cost of production. (In practice, of course, a firm may carry on at a loss for a while, in hope of better times.) The marginal cost of production, then, is not

permanently fixed any more than the marginal utility of the consumer. Changes in the market price level alter the position of the margin.

At any given time, therefore, there are a number of firms producing similar goods at varying costs, but all selling them at one price. This price must be equal at least to the costs of the marginal firm, or better, to the marginal cost of production.

CONCLUSIONS ON THE THEORY OF VALUE.

The Labour and Cost of Production Theories were seen to fail mainly because they attempted to explain exchange-value from the side of *supply* only. A theory which attempted to explain value from the *demand* side only would have to contend with at least as many difficulties. Labour and the other elements are very important, but they are not the only factors. In the modern theory, both supply and demand are considered. While due importance is attached to the cost of production, stress is also laid on the utility that the consumer derives.

It has been shown that utility is the principal factor in demand, and that the exchange-power of a commodity tends to equal its marginal utility. Also, that the chief factor in supply is the cost of production, and that the exchange-power of a commodity tends to equal the marginal cost.

Demand and supply tend to balance at a point where the marginal utility is equal to the marginal cost of production, both as measured in terms of money. This point fixes the price or money-exchange value.

Importance of the Element of Time. A slight qualification of the theory has to be made. *In a short period,* i.e. when there is insufficient time to increase or decrease

the supply of anything in accordance with changed requirements, *demand* will tend to play a bigger part than supply in affecting value. *In a long period*, when the necessary adjustments can be made, conditions of *supply* will tend to have a greater influence.

"Thus we see that utility and cost of production both play a part in governing value. And we might as reasonably dispute whether it is the upper or the under blade of a pair of scissors that cuts a piece of paper, as whether value is governed by utility or cost of production. . . . *As a general rule, the shorter the period we are considering, the greater must be the share of our attention which is given to the influence of demand on value; and the longer the period, the more important will be the influence of the cost of production on value.*" (Marshall.)

The marginal theory satisfactorily overcomes the difficulties that beset the earlier attempts to explain value, which were shown to attach too little importance to utility. The utility of misdirected resources is low, and therefore the exchange-value is low. Similarly, a high utility is attached to things that are scarce, while changes in the utility of a thing after production bring about changes in the price. Finally, the "paradox of value" in the case of water, for example, can easily be explained. Though water is essential for life itself, its exchange-value is extremely low, because the supply is so abundant as to cause the utility of the marginal unit to be almost negligible. Water is as freely available for watering a garden as for drinking, and the lesser use governs the value of the higher.

CHAPTER VI

SUPPLY AND DEMAND

Section 1. *Market Price*

MARKETS.

THE word "market" used to refer to a place or building where sellers and buyers congregated for the purposes of sale and purchase. The meaning, in principle, has remained the same, but has been extended to cover a set of conditions as well as a particular place. The term now covers a commodity or commodities with the respective buyers and sellers, and, under best conditions, implies free competition between buyer and buyer, seller and seller. The market for a commodity may be restricted in area or be world-wide; it may be of short duration or cover a long period.

In the **Evolution of the Market,** four stages may be distinguished, and examples of each can still be found.

(i) *The Localization of Markets.* Buyers and sellers would meet in an agreed place, the latter exhibiting all the goods they were offering for sale.

(ii) *Selling by Sample.* By this means, the expense of transporting goods was reduced, the area of the market increased, and competition became more effective.

(iii) *Selling by Grade.* This is a further development in the growth of the market. The different qualities are graded or standardized, with the result that a buyer need only quote the identifying mark of the grade required. Resort to samples becomes less necessary where grading is practicable.

(iv) *Specialization of Markets.* The modern market

tends, for reasons of efficiency and convenience, to grow more specialized. While the old-type market sold almost everything, the market of to-day deals usually with one class of goods only.

Conditions of a Perfect Market.

(i) Easy and speedy means of communication between buyers and sellers throughout the market.

(ii) Free competition among sellers and among buyers. In a perfect market, there can be only one price for a commodity at a time.

(iii) Wide extent of market. Where the commodity is bulky or heavy, the transport costs may be very high, naturally restricting dealings. The market for securities, trade bills, etc., is very wide, and the nearest to attaining the conditions of perfection.

NORMAL PRICE AND MARKET PRICE.

The **Normal Price** is the average price that obtains through a long period, the pivot, as it were, about which the varying prices oscillate.

The Sub-normal or Market Price is the short-period price at which the amount offered for sale is equal to the amount demanded. Price variations are a common feature on the markets and, where the article is seasonal or perishable, the fluctuation may be very pronounced.

Should the market price be higher than the normal price, production will be increased until the price falls. If, on the contrary, the market price is below the normal price, production will be restricted until the price rises.

Normal price tends, under free competition, to equal the cost of production. As indicated above, this means the marginal cost of production.

If the price is above the cost of production (including minimum profit) and competition is free, competitors

will come into the market, increase the supply, and force the price down. Conversely, if the price falls below the cost of production, the supply will be restricted and the price will rise again.

Perfect Competition is Seldom Realized.

Perfect competition between seller and seller on the one hand, and buyer and buyer on the other, is not usually realized in practice. Hence, **though normal prices tends to equal the cost of production, they may not coincide.** The chief reasons are—

(i) *Custom and Habit.* Custom may keep a price *above* the normal price level (i.e. the marginal cost of production), but cannot, in a business world, keep it below.

(ii) *Immobility of Labour.* There is always a certain amount of inertia, the mobility being hindered by family ties, personal preferences, ignorance, etc.

(iii) *Long Period Production.* Production usually begins a considerable time before marketing, making precise calculation difficult. Where conditions change in the interim, the cost of reproduction has to be considered.

(iv) *Perishable Goods and Seasonable Demand.* Where the goods are perishable, they cannot be held over for better prices. Similarly, where the demand is seasonable or spasmodic, the normal price may be well above the cost of production.

(v) *Large Fixed Capital.* Where a huge capital expenditure is an essential preliminary to production, competition may be restricted. Here conditions are akin to monopoly. On the other hand, a large plant may be kept working for a time at a loss rather than close down.

(vi) *Monopoly.* Where there is a monopoly of producers, the price may be considerably above the cost

of production ; where there is a monopoly of buyers, the sub-normal price may, *for a short time*, be below the cost of production.

NATURE OF DEMAND AND SUPPLY.

(i) Demand must be distinguished from " desire," which only indicates a wish for something.

Economic demand postulates three conditions—

(*a*) Desire for something ;

(*b*) Means to purchase it ; and

(*c*) Willingness to use those means.

Demand, therefore, is effective desire.

In the same way, supply must be distinguished from " stock " ; supply is the amount of the stock that is actually offered for sale. The more perishable a commodity, the more identity there is between stock and supply.

Though desire and stock may be regarded without direct reference to price, **there is no such thing as demand and supply apart from price.**

(ii) The demand for anything is said to be *elastic* when a rise or fall in price causes an appreciable fall or rise in demand.

It is said to be *inelastic* when movements in price have comparatively little effect in the demand.

The demand for necessaries is, on the whole, inelastic ; for luxuries the demand is usually elastic.

Where there are possible substitutes, the demand will be more elastic than otherwise.

Similarly, supply is said to be elastic when it varies appreciably with a change in price ; inelastic when price-changes have relatively little effect.

[Some writers distinguish between the " intensity " and " extensity " of demand. By the former, they mean the point which the price reaches ; by the latter, the

quantity bought at that price. The use of the terms is quite unnecessary, however, as their meanings are already covered by the ordinary terms in use, " price " measuring " intensity," and " demand " equivalent to " extensity."]

ALTERNATE, COMPOSITE AND JOINT DEMAND AND SUPPLY.

(i) **Alternate Demand and Supply.** Demand is said to be alternate when a choice can be made between things that may substitute for each other. Thus there is an alternate demand for butter and margarine, wool and cotton, electric and gas light, etc. A shortage in the one may cause a rise in price, but not so high as if there were no substitute. Thus, the price of the one will be influenced partly by the price of the other. The price of margarine may go up or down with the price of butter, quite independent of its own cost of production.

Supply is said to be alternate when one set of factors can be made to turn out more than one class of goods. Thus land can be used for growing either wheat or barley, whichever is the more profitable.

(ii) **Composite Demand and Supply.** Demand is said to be composite when a commodity is demanded for two or more different purposes (e.g. coal used in manufacture and the household).

Supply is said to be composite when a commodity can be produced from two or more quarters (e.g. different firms turning out boots, or a motor and a train supplying conveyance).

Most demand and supply is composite, except where there is monopoly, which can exist in demand as well as supply.

(iii) **Joint Demand and Supply.** The demands for two or more things may be *complementary* (e.g. pipes and tobacco). For both pipes and tobacco there is a *joint demand.* The ratio of one to the other may be variable (as in above example) or fixed (as in steel knife-blades and ivory handles). Further, a thing may be demanded in more than one joint relation, and may also be desired for its own direct utility.

A demand for anything involves indirect demand for the factors that have gone to produce it (e.g. demand for bread involves demand for land, seed, labour, machinery, transport, etc.). This is called *derived demand.*

Things are said to be in *joint supply* when they can be produced from a single source (e.g. mutton and wool ; leather, beef, and milk). The ratio may be variable or fixed.

Influence on Price.

These conceptions are of great importance in the determination of prices. In the case of joint supply, for instance, while the price of the total product will obviously equal the sum of the prices of the constituent parts, the proportions of the latter to each other will depend partly upon conditions of supply, partly upon those of demand. The producers of linseed and flax will aim at getting a gross return equal at least to the cost of the joint production. If the demand for one of the joint products is not sufficient to absorb the supply, the price may be lowered so as to increase the demand. Similarly, the price of the other product may be raised in order to restrict the demand. Where the goods are produced in a fixed ratio, it follows that their respective prices must be at such a figure that they are demanded in the same proportion.

MARKET PRICE.

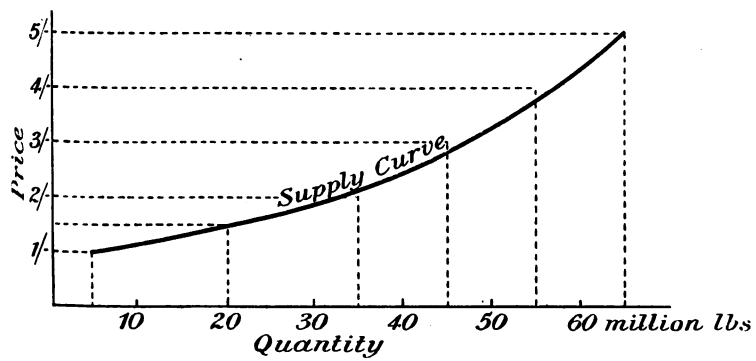
It has been seen so far that the price of a commodity *tends* to equal its marginal utility as measured in money, and that it also *tends* to equal the marginal expenses of production. One would expect, therefore, that *the point at which the marginal utility on the consumer's side as measured in money balances the marginal expenses on the producer's side will fix the position of the price.*

This may be illustrated by a further application of the example of butter given above. It was noted that if the price of butter were 4s., the housewife would buy 1 lb., but when it fell to 2s. she would buy 4 lbs. An increase in demand follows a reduction in price, partly because the previous consumers purchase more, partly because the number of consumers is increased. Over a whole community, the figures might work out as follows—

If the price were	5/–	per lb.,	10	million lbs.	would be demanded				
,,	,,	,,	4/–	,,	15	,,	,,	,,	,,
,,	,,	,,	3/–	,,	20	,,	,,	,,	,,
,,	,,	,,	2/–	,,	35	,,	,,	,,	,,
,,	,,	,,	1/6	,,	50	,,	,,	,,	,,
,,	,,	,,	1/–	,,	60	,,	,,	,,	,,

[These diagrams, like the others in this book, are supplementary to, not inherent parts of, the text, which is intended to be complete in itself.]

Regarding now the price from the producer's point of view, we see that the low price of 1s. per lb. would not result in much production. Only those dairymen whose costs were very low could produce butter at that price and make a profit. If the price were raised, the supply would be increased, partly because the first dairymen will push up their production until they reach *their* margin (*see* Chapter V, § 2), partly because the number of producers will be increased.

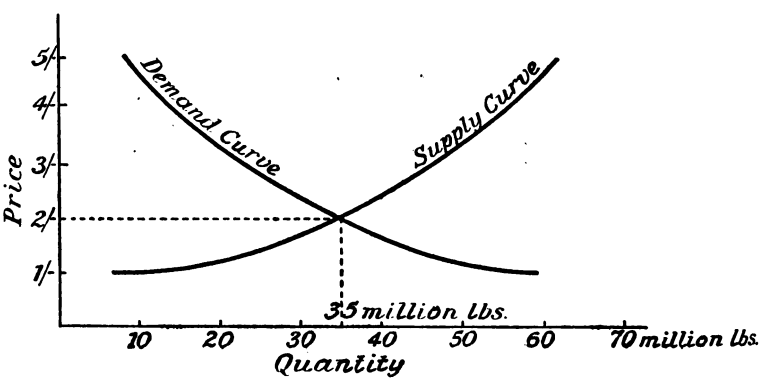


If the price were 1/- per lb., 5 million lbs. would be produced
" " " 1/6 " 20 " " " "
" " " 2/- " 35 " " " "
" " " 3/- " 45 " " " "
" " " 4/- " 55 " " " "
" " " 5/- " 65 " " " "

Combining the tables of demand and supply, we get—

Demand.	Price.	Supply.
60 million lbs.	1/-	5 million lbs.
50 " "	1/6	20 " "
35 " "	2/-	35 " "
20 " "	3/-	45 " "
15 " "	4/-	55 " "
10 " "	5/-	65 " "

It is easy to see which will be the market price of butter. It cannot be 1s., as at that price there are 60 million lbs. demanded, but only 5 million lbs. supplied. *Competition among buyers would force the price up.* On the other hand, it cannot be 5s., as at that price there are 65 million lbs. supplied, but only 10 million lbs. demanded. *Competition among sellers would force the price down.* **The price will be at such a level where demand balances supply, viz., 2s., the demand and supply being 35 million lbs. each.** At this figure, there will be some people receiving a "consumer's surplus," and some dairymen making a "producer's surplus."



THE LAWS OF SUPPLY AND DEMAND.

We are now in a position to sum up the general Laws of Supply and Demand.

(i) **If at a given price the demand for a commodity or service exceeds the supply, the price tends to rise. If the supply exceeds the demand, the price tends to fall.**

(ii) **A rise in price tends to restrict demand and increase**

supply. A fall in price tends to restrict supply and increase demand.

(iii) **An increase in demand or restriction in supply tends to raise prices. A restriction in demand or increase in supply tends to reduce prices.** (*See*, however, qualification (*d*) below.)

(iv) **The price ultimately tends to the point where supply and demand are balanced.**

To which should be added the conclusion arrived at above, viz.—

(v) **Demand and supply tend to balance when the marginal utility is equal to the marginal cost of production, both as measured in money.**

NOTES ON THESE LAWS. (*a*) The above laws only express tendencies, and the implicit condition throughout is " other things being equal."

(*b*) The supply of some things is very inelastic or even fixed (e.g. land) ; in such circumstances, a rise in price cannot seriously affect the supply.

(*c*) The demand for some things is very inelastic and a rise in price may not have an appreciable effect in the demand. (In the case of bread, it has been found that a rise in price is actually followed by an *increase* in the demand from poor families, who make up for the extra cost by economizing in other directions. They find that their reduced income will derive more utility from the purchase of more bread than of other things.)

(*d*) With special reference to law (iii), it is only necessarily true for a short period. In the long period, everything depends on the nature of the returns. " The first effect of increased demand is to raise prices ; the ultimate effect is to lower them." If the commodity is being produced under increasing returns (i.e. diminishing

cost), an increase in demand will stimulate further production at a diminishing cost per unit, and thus bring about lower prices. A restriction in demand will mean, on the other hand, smaller output at increasing cost per unit, with consequent rise in price. (Where the commodity is being produced under diminishing returns, extra production means increasing cost, with consequent higher prices. Less production means lower costs per unit.)

Section 2. Monopoly Price

THEORY OF MONOPOLY PRICES.[1]

In circumstances of free competition, price has been shown to be determined by the marginal cost of production from the one side and the marginal utility from the other. Undue profits made through selling considerably above cost of production would invite competitors to enter the field and bring the price down approximately to the cost of production.

The monopolist has no such fear. While his cost of production will put a minimum price upon his product, he is at liberty to charge any price above that figure as he chooses, leaving the amount demanded to be decided by the public. Or he can dispose of any reasonable supply that he wishes, leaving the price to be determined by the market. If he fixes the output, the price at which it sells will not be above the marginal demand price. If he fixes the price, the quantity of supply will

[1] Monopoly prices are usually associated with monopolist producers, and are considered here in this light. But it is possible to have a monopoly of consumers, e.g. people at an auction agreeing not to outbid each other. This form of monopoly, however, is not so important. In any case, the principles governing the determination of *all* monopoly prices are the same, and can easily be applied to particular instances.

be governed by the marginal purchaser. Thus the power of the monopolist is not absolute. *He may fix either price or output, but not both.* Assuming that he is perfectly informed and makes the best decision from a business point of view, it may be stated that the *monopoly price is fixed at that point at which the biggest net profit will be obtained.*

The price (and also the profit) will be governed by the nature of the product and the demand, and (though to a smaller extent) by the nature of the returns in production.

(i) Where the article is a necessary and no efficient substitute is available, the demand will be *inelastic.* This will enable the monopolist to raise the price appreciably without much falling off in demand. Where, on the other hand, the article is not a necessary or can be replaced by a substitute, the demand will be fairly *elastic.* The monopolist may find that raising the price is accompanied by a serious fall in demand. He must accordingly adjust it at such a level that the maximum *net* profits are obtained.

(ii) A reduction in price may increase demand and also net profit. But quite apart from this, a monopolist may find it profitable to reduce the price if he is producing under *increasing returns* (i.e. diminishing costs). Even if the demand were not stimulated, the loss from that quarter might be more than balanced by the economies of large production. In practice, of course, a monopolist aims at getting advantage from both sides, the net profit being the best indicator. If, on the contrary, the article is produced under *diminishing returns* (i.e. increasing costs per unit), it will not pay a monopolist to reduce the price, unless the profit due to extra demand more than covers the extra costs of production.

Where an article is produced under *constant returns*, the monopolist, in determining the price, will pay attention only to the demand side, without any reference to cost except as the minimum.

Illustration of Monopoly Price Determination.

An illustration of the way in which monopoly prices are determined is given in the following table. It will be observed that the demand is elastic, and that the article is produced under increasing returns.

Price.	Number of Sales.	Total Receipts	Cost per Unit.	Total Cost.	Receipts less Cost—Monopoly Profit.
s.		£	s.	£	£
24	4,000	4,800	22	4,400	400
23	6,000	6,900	20	6,000	900
22	8,000	8,800	19	7,600	1,200
21	10,000	10,500	17	8,500	2,000
20	11,000	11,000	16½	9,075	1,925
19	12,000	11,400	16	9,600	1,800

The price of the article will tend to be 21s., for at that figure the biggest profit is made, namely £2,000.

It should be added that monopoly prices may vary in different regions. Firms often sell their product in another country at a lower price than at home, even though they have a monopoly and do not fear foreign competition. The reason may be that the foreigner is not willing to pay as much for the article as the home customer.

Railway charges are an example of varying monopoly prices, and may suitably be considered in this connection.

RAILWAY RATES.

Railway rates come largely under the heading of monopoly prices. Though the goods-schedules are fixed by Parliament, these only state the maximum rates, and the railways often charge considerably below them. It is said that three-quarters of the total traffic is carried at reduced rates. The object of the reduced charges is not so much due to competition as to the desire to carry a large traffic, which will spread the very heavy standing expenses over a bigger number of units.

Peculiarities of the Railway Industry.

(i) Monopolistic nature (though the developing road-transport schemes are to a limited extent offering competition, which is also found, but to a still less degree, where there are alternative water routes).

(ii) Fixity of the capital.

(iii) High standing charges, which have to be borne whether the traffic is large or small.

Possible Methods of Fixing Goods-Rates.

(i) *Averaging:* an average rate of so much per cwt. or ton would probably stop the heavy and bulky traffic, which would find this rate prohibitive.

Further, where there are two or more competing lines serving the same district, averaging would be difficult in practice.

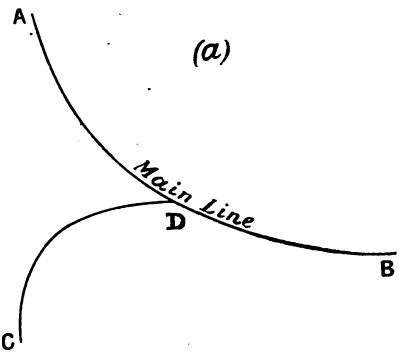
(ii) Making every kind of carriage bear its own cost: the result would be very similar to that of (i).

(iii) "*Charging what the traffic will bear*": the method that is adopted. Goods are classified and rates are adjusted in such a way that all the goods will "bear" their respective rates. This practice has met with opposition where alleged unfair differentiation is made.

The method is best explained by examples.

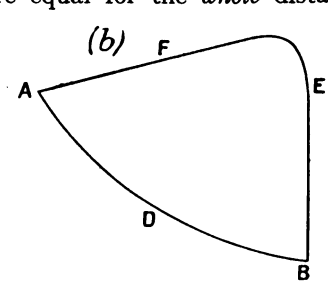
(*a*) The rate for CD may be greater than that for AB, the reason being that AB is a main line with

plenty of traffic, while CD is a branch or subsidiary line with relatively little traffic. Raise the AB rate; this will mean less traffic, therefore higher standing



burden all round, adversely affecting line CD. Lower the CD rate, and the railway company may stop the service altogether on the ground that it does not pay.

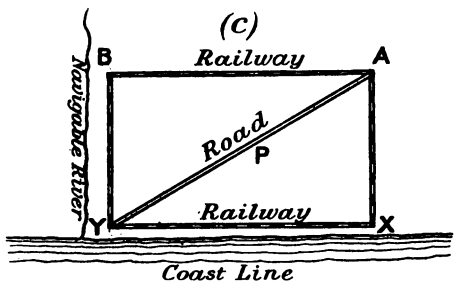
(*b*) Competing lines ADB and AFEB. Therefore freights are equal for the *whole* distance. But the



rate for FEB may be as great as, or greater than, the rate for AFEB, for the reason that there is no competition between F and B.

(*c*) The rate for AX may be higher than that for BY, if the latter route has to compete with a navigable river.

Also, between A and Y there are the following competitive routes: ABY (railway or rail-and-river),



AXY (railway or rail-and-sea), and APY (road). Here some differentiation must be made.

(*d*) " Fag-end " rates, such as that from Glasgow to London. This may be the last part of the journey from New York; and if the freight is not low, the goods may go all the way by sea, which is usually cheaper than land transport.

PART III

DISTRIBUTION OF THE SOCIAL PRODUCT

CHAPTER VII

THE NATIONAL INCOME

EMERGENCE OF THE PROBLEM OF DISTRIBUTION.

THE principles governing the distribution of the national income among the different classes of the community present some of the most controversial problems in economics. In order to obtain a clearer view of the subject, it is useful, here as elsewhere, to note the events and factors that brought about the present position.

In early times, the problem of distribution was comparatively straightforward. When a commodity was produced with little or no resort to division of labour, a man could regard it as the direct product of his own efforts. Such raw materials and implements as were used might be his own, and therefore the question as to what were the respective shares going to land, capital, and labour did not arise in any serious form. This does not necessarily imply that a man always enjoyed the product of his own efforts. Slavery, feudal dues, plunder, etc., were all possible reasons for its being enjoyed by others. Nevertheless, the *economics* of such a society would not be difficult to understand.

Division of labour means not only the co-operation of a number of individuals, but also of a group of factors. When half a dozen men assisted each other in building a hut and growing corn, the system of distribution of a

joint product was emerging, but still in a relatively simple form. When with the Industrial Revolution it often took many men of different grades and a large quantity of capital and materials to produce a single class of commodity, the economy became much more complex. The visible results of the distribution led to a more acute examination of the system than it had ever been subjected to before.

PROCESSES OF DISTRIBUTION.

The processes of distribution have been classified as follows—

(*a*) **Primary.** A person receives payment for his product, whether material goods or personal services, *directly* from the consumer (e.g. a " small " bootmaker, portrait painter, doctor). This form of distribution is not so common now as formerly. One of the outstanding features of modern industrial organization is the *indirect* nature of production and distribution.

(*b*) **Secondary.** A person receives an income for his effort or the use of his property as a member of a large group. Most of the national income is received nowadays in this way. Several people co-operate in production, which is often commenced in anticipation of demand, and may also take up a considerable length of time. But during this period, payment has to be made for labour, materials, etc. Under such conditions, distribution must necessarily be *indirect.* All incomes from buying and selling would be considered secondary.

(*c*) **Tertiary.** That portion of the social product which goes to the rearing and training of children and youths, to the maintenance of the aged and infirm, etc., would come within this class. It is not a payment for services or use of property, and could not therefore be included under the previous headings. But the

proportion of the collective product consumed in this way is too important to be omitted.

NATURE OF THE PROBLEM.

The study of distribution involves the consideration of many questions, of which the following three are the most important—

(i) **How much is there to be distributed ?**

(ii) **Among which people or factors is the wealth divided ?**

(iii) **What decides the amount of the share to each group and to individuals within the group ?**

The last question touches the most fundamental problem of all. Stated another way, it asks what governs the value of each group's contribution to the national wealth. The theory of value which was examined in Part II of this book is of wider application than mere use in understanding the mechanism of exchange. If labour and capital and raw materials are set together to produce some goods, the payment that is made to each factor is governed, *to a large degree*, by the same considerations that determine the value in exchange of anything else.

The words " to a large degree " were stressed because in the *practice* of distribution, certain causes may operate which prevent the strict economic law from operating. In the determination of wages, for example, the rate may be influenced by combination on the part of the workers or the employers, or may be fixed or given a minimum level by State or other authoritative decision. *In the long run*, of course, an uneconomic rate will have its effects, whether it be for labour or anything else, and then there will have to be readjustment or subsidy. *But the economic is not the only standard for the rule of life, and experience has shown that within certain limits*

it may be to the community's advantage to modify the operation of an economic law. Thus, if the granting of a minimum wage to the "sweated" workers was an infringement of the laws of supply and demand, it was a justifiable one. (Experience has shown that these minima have often resulted in higher efficiency and a more than corresponding return for the extra remuneration.) Again, during and since the war, prices were controlled, i.e. an interference with the laws of supply and demand. Where it was done with intelligence and accompanied by the necessary precautions, the result was distinctly for the good of the community as a whole.

It will be observed in the following pages that the modern theories of wages, interest, etc., are, as a rule, simply applications of the basic law of value.

THE NATIONAL INCOME AND WEALTH.

The National Income or Dividend is defined by Dr. Marshall as the "aggregate net product of, and the sole source of payment for, all the agents of production." Sir Josiah Stamp defines it similarly as "the aggregate money expression of those goods produced and services performed by the inhabitants of the country in a year which are, as a fact, generally exchanged for money."[1]

In measuring the National Income, precautions must be taken not to reckon the same thing twice, as will be done, for example, if the total values of the raw material and the finished product are both included. Again, allowance must be made for depreciation and also for incomes from foreign investments.

Sir Josiah Stamp considers as "matters of principle, formerly negligible, but now of great importance," the values of the household services of wives, co-operative incomes, payment of interest on the National Debt, etc.

[1] *Wealth and Taxable Capacity* (1922).

The National Wealth.

Before examining the distribution of the *income*, one may quote the finding of Sir Josiah Stamp on the **distribution of the capital wealth** at the present time.

Million £ 4,555				Fortune in £ under 5,000
1,217	held by	169,040	to	10,000
2,202	,,	138,460	,,	25,000
1,731	,,	48,810	,,	50,000
1,432	,,	20,570	,,	100,000
1,615	,,	11,200	,,	250,000
1,020	,,	2,971	,,	500,000
405	,,	653	,,	750,000
195	,,	230	,,	1,000,000
681	,,	322	over	1,000,000

15,053 million £ of which 10,500 million £ is held by 392,256 persons.

DISTRIBUTION OF INCOME AMONG CLASSES, 1880 and 1913.

Prof. A. L. Bowley[1] has estimated that the National Income was distributed in 1880 and 1913 as follows—

The National Income.

	1880			1913		
	Number of Incomes, 000's	Income.		Number of Incomes, 000's.	Income.	
		Amount	% of Total.		Amount.	% of Total.
		£ million.			£ million.	
Wages . .	12,300	465	41½	15,200	770	35½
Intermediate income under £160[2] .	1,850	130	11½	4,310	365	17
Income assessed to tax over £160, excluding wage earners	620	530	47	1,190	1,030	47½
Totals . .	14,770	1,125	100	20,700	2,165	100

[1] *Change in Distribution of National Income*, 1880–1913.

[2] i.e. the income tax exemption limit before the war. The "Intermediate" class denotes non-wage-earners who were not liable to income tax.

Very briefly the summary of his conclusions is that—

"The proportion of the national income received as wages diminished from about 41½ to 35½ per cent, but the receipts per wage-earner increased about 34 per cent.

The proportion received by persons assessed to income tax increased slightly.

The proportion received by the intermediate class increased at least . . . from 11½ per cent of the whole to 17 per cent in 1913.

The average of all incomes was about £76 in 1880 and £104 in 1913, an increase of 37 per cent."[1]

Distribution among Property and Services.

Prof. Bowley also estimated that both in 1880 and in 1913 the distribution between property and labour remained in the same proportions, viz., 37½ per cent to property and 62½ per cent to labour.

	1880	1913	Percentage in both instances.
Property incomes	£420 million	£810 million	37½%
Services of all kinds	£705 ,,	£1,355 ,,	62½%
Total income	£1,125 ,,	£2,165 ,,	100%

DISTRIBUTION SINCE 1913.

During the war, the income tax exemption limit was lowered and some 4 million wage-earners, hitherto below the limit, were brought within the scope. Complicating factors were the rise in prices and the living on capital, which concealed the true nature of the nation's actual productivity.

For 1918–19, Sir Josiah Stamp estimates the National Income to have been about 3,600 to 3,700 million £. For 1919-20, the same authority suggests 3,700 to 4,100 million £.

[1] The purchasing values of money in 1880 and 1913 respectively were near enough to afford a reasonable comparison.

With reference to the *Constancy of Distribution*, he goes on to say—

"In 1914 some 8 per cent of the total income of the country belonged to a very small fraction, less than one-tenth of 1 per cent of the receivers of incomes. The next 22 per cent in amount went to 1 per cent of the number of incomes, and the next 15 per cent of amount of incomes to 4½ per cent of the people receiving incomes. This amounts to 45 per cent of the incomes going to about 5½ per cent of the people with separate incomes. Now the money levels of the incomes may alter, but these proportions have remained approximately constant. What I may call the 'slope' of distribution has not materially altered, and, although all classes may have become better off, they have kept their relative positions and proportions with remarkable stability so far as we can test."

Later, he concludes—

"The total nominal income has increased much more than the total population—the increase has surged upwards through all the fixed classes, so that there is a smaller population in the ranks of the poorest, with a nominal income of, say, under £80 a year, and many more in the over £5,000 class, but the *slope* of distribution, i.e. the *relation* between one section or class and another, has hardly altered."

DISTRIBUTION AMONG THE FACTORS OF PRODUCTION.

The usual method adopted in analysing the system of distribution is to take the factors of production in order and observe the principles governing the share that goes to each. Land, Labour, Capital, and Organization receive respectively Rent, Wages, Interest, and Profits. This method is a convenient one, and makes for simplicity. But it is not altogether satisfactory if over-simplified, since the danger then arises of paying too much attention to the *factors*, and too little to the *persons*, among whom the national product is distributed. *Justification of the shares going to capital and land is not necessarily a justification of the incomes of the capitalist and the landlord, unless the ownership of the capital and the land is also justified.*

In this connection it may be observed that a person often receives an income from supplying more than one of the factors of production. A "small" printer derives a return from his labour and also from the capital invested in such machinery, etc., as he possesses. If he should own the land on which his shop is built, he will receive some return in the form of rent; while, finally, enterprise on his part might bring a profit over and above the inclusive sum derived from the other three factors. In practice, he may not distinguish among the different sources of income, but if his business grows he will find it very necessary to do so.

Principle of Substitution Applied to Distribution. The competition, as it were, on the part of the different agents of production for use by the entrepreneur was considered in Chapter V, § 2. It was seen that the factors tended to be employed in such proportions that the marginal returns from each were equal. Under perfect competition among these agents (though this is very seldom realized), a point is reached when it becomes a matter of indifference whether "a little more or less" of one or other factor is employed.

It will be evident from the study of distribution that the joint product from the various factors tends to be distributed among them in a similar way, i.e. in proportion to the marginal need.

REDISTRIBUTION AND WELFARE.

It has often been stated that the wealth of the country, however distributed, is insufficient for a general high standard, and that, therefore, it is incumbent upon everybody to increase the national product (e.g. Bowley, *Division of the Product of Industry*).

Without wishing to minimize the importance of an increased output, one may point out that the national

satisfaction might be increased without *necessarily* adding to the volume of the national *income.* As was explained in the pages on diminishing utility, a specific sum of money means more utility to a relatively poor man than it does to a rich man. The former would gain more satisfaction by the receipt of that sum than the latter would lose by its surrender. Thus a more equitable distribution of the product would by itself increase the national welfare.[1]

Secondly, curtailment of very large incomes would mean less money spent on luxuries. The material resources of the community could therefore be diverted into more economical channels, and enable the primary needs of the people to have first claim on the social product.

Thirdly, persons employed in producing things and services of relatively little social utility could also divert their efforts to the provision of the elementary necessities of life.

[1] On the other hand, it is sometimes contended that while a redistribution would increase the total satisfaction now, the supply of capital would be curtailed, and future production would therefore suffer.

CHAPTER VIII

WAGES

Section 1. *The Payment of Wages*[1]

THE remuneration of labour presents many problems, some of which do not arise in considering interest, profits and rent. Labour-power being inseparable from the owner naturally involves more personal considerations. The human element cannot, and ought not, to be ignored.

A few of the problems that have to be examined are—

(i) The share of the national dividend that goes to labour. This involves the study of *general wages.*

(ii) The variance in wages in different occupations, and also in different countries. This involves the study of *relative wages.*

(iii) The methods of remuneration.

(iv) Labour organizations and their effects on wages.

NOMINAL AND REAL EARNINGS.

Nominal Income is simply the amount as measured in terms of money. But this, without reference to the level of prices, affords no criterion of the real worth of income, whether in the form of wages or anything else.

Real Income is the purchasing-power of the money income. During and since the war, most nominal incomes increased, while their purchasing power fell. Similarly, one country may receive a higher monetary but a lower real income than another.

[1] Throughout this and the following chapters on Distribution, reference should be made to the corresponding chapters on Production.

Real Wages depend on—

(*a*) Variations in the level of prices.

(*b*) Variations in the form of payment (e.g. the agricultural labourer's cottage and certain amount of food, the miner's cheap coal, the civil servant's pension, etc.).

(*c*) Length of working day and holidays.

(*d*) Possibility of extras in spare time (e.g. playing in an orchestra).

(*e*) Possibility of wife or children adding to family income.

(*f*) Character of work and effect on duration of working capacity (e.g. leadworking, metal-grinding, service in tropical countries, all of which, through periods of sickness or impossibility to continue after middle life, reduce the total wage received).

(*g*) Regularity of employment. Some trades are seasonal (e.g. agriculture, building, etc.); others are irregular (e.g. fishing, etc.). The real wage depends on the total earnings over a period.

(*h*) Chance of success. A man may be willing to work for a low wage for a time providing there is reasonable opportunity of promotion later.

(*i*) Pleasantness of and social prestige attached to the work. Some occupations carry a social position which is included in the real worth of the remuneration.

Wages and the Cost of Living, 1914–1920.

The table on top of page 97 is adapted from Prof. A. L. Bowley's estimates[1] and the Ministry of Labour's statistics.

NOMINAL AND REAL LABOUR COST.

In the same way as the worker has to distinguish between his nominal and real income, so the employer,

[1] *Prices and Wages in the United Kingdom*, 1914–20.
See also Graph of Cost of Living and Wholesale Prices, Chap. XIII, §1.

WAGES IN CERTAIN INDUSTRIES COMPARED WITH THE CHANGE IN COST OF LIVING

Industries (1st July)	1914	1915	1916	1917	1918	1919	1920
Bricklayers . . .	100	102	108	122	157	185	235
Bricklayers labourers	100	103	115	134	185	224	300
Compositors . . .	100	100	105	120	156	196	246
Railwaymen . . .	100	110	120	155	195	225	280
Dock labourers . .	100	111	130	150	193	209	266
Cotton operatives .	100	103	107	119	157	202	259
Woollen and worsted operatives . . .	100	115	126	144	164	196	239
Engineering artisans	100	110	111	134	173	199	231
Engineering labourers	100	—	—	154	213	255	309
Shipbuilding platers' time-rates . . .	100	—	—	130	169	193	223
Coal mining . . .	100	113	129	136	187	224	260
Agriculture (England Wales)	100	112	—	—	189	226	270 (about)
General Rough Average Wage of above Trades	100	105–110	115–120	135–140	175–180	210–215	260
Cost of Living— *Labour Gazette* Index	100	125	145	180	205	210	252 1921:219 1922:184
Modified Index . .	100	(120)	(135)	(160)	180	185	220

from his point of view, distinguishes between the *wages* and the *labour cost*. The two are by no means identical. The former indicates the sum paid out, the latter means the actual worth to the employer.

Wages may be high, yet the labour cost low. This is another way of wording the old statement, " Low wages are dear wages." It has been proved abundantly that a wage which is below the " poverty line "[1] (i.e. which does not permit of a sufficient standard of life) adversely affects the quality of the work done, and the cost per

[1] Poverty has been defined as " primary " where the income is insufficient to provide the minimum necessities of life ; " secondary " where the amount may be sufficient, but for various reasons is not spent to the best advantage ; e.g. money spent on alcoholic drink at the expense of food and clothing.

unit is high in consequence. An increase in wages *up to a point* is accompanied by an added efficiency, perhaps more than sufficient to compensate for the increment in the wage bill. The wages paid to the textile workers in Lancashire are the highest in the world, but the products are the cheapest in the world. The reason is simply that efficiency wages are paid. The nominal cost per operative is high, but the yield is so great that the cost per unit of output is low.

HOURS, WAGES, AND MACHINERY.

The same principle applies to the number of hours that a man works. If the working day is so long that the efficiency of the men is impaired, it may be found that a shorter working day is accompanied by such an increase in their efficiency that as much work is done as before, if not more. The reduction in the working day, unaccompanied by a reduction in output, can only take place, of course, up to a point, beyond which the output per man, who has now reached the stage of maximum efficiency, must necessarily decline.

But there is another factor to be considered, namely, the importance of machinery. The introduction of new machinery often means scrapping the old long before the latter is worn out. To make full use of machinery before it becomes antiquated, certain writers suggest that the workers should be arranged in two or three *shifts* per day. The supporters of the six-hour day are not restricted to the workers alone. Some employers contend that if a system could be arranged, so that the machinery could be used for eighteen hours a day, meaning three shifts of six hours per man, the extra return from the fuller use of the machinery, and the spreading of the standing charges over a bigger gross

output, would be at least sufficient to allow for the reduction in output per man (if any) and pay the same wages for the shorter as for the longer working day.

Wages and the Proportion of Machinery to Labour. A further point must be noted in connection with machinery and wages. Where the capital expenditure on plant and tools is large compared with the sum spent on wages, an increase in the latter does not cause such an increment in the total costs as where the proportion of machinery to labour is small. Consequently, employers whose establishment charges are high feel an increase in the wage bill less than those whose establishment costs relative to the wage bill are low. This also helps to explain the high wages in the Lancashire textile trade, where the proportion of machinery to labour is very high.

(For the influence of machinery on employment, *see* Chapter XI, § 1.)

PECULIARITIES OF DEMAND AND SUPPLY IN RELATION TO LABOUR.

Though labour is not a commodity, it is often bought and sold in the market in many ways similar to the purchase and sale of goods. The following peculiarities of labour should be noted—

(i) A man's labour is part of himself, and, therefore, different from material commodities, cannot be delivered except in person. This may be a trite remark, but it has important bearing on the distinction between the payment for labour and that for the other factors of production. It is difficult for the seller to control the supply, the withholding of which for a length of time may mean starvation.

(ii) Labour withheld means, as a rule, so much labour

power lost to the community.[1] It cannot be kept back like goods to await a better market. Labour may be likened to a very perishable commodity.

(iii) In the absence of efficient Trade Unionism, a man who sells his labour is at a disadvantage in bargaining with an employer. The seller of labour is one unit; the employer may be equal in bargaining power to hundreds of units, from which he can select or discard as he pleases. One of the principal functions of trade unions is to substitute collective individual bargaining, and so remedy this disadvantage.

(iv) For reasons previously considered, the growth of new supplies of labour is very slow. Similarly, cutting down of supplies of particular kinds of "redundant" labour is extremely difficult.

METHODS OF REMUNERATION.
TIME AND PIECE EARNINGS.

Wages are paid in a variety of ways, but the principal methods are by Time or Piece, or a combination of both. In the calculation of one rate, it is essential, of course, to make reference to the other.

The following is a rough summary of the main arguments adduced in favour of and against time and piece rates respectively. To a great extent, the advantages of the one correspond to the disadvantages of the other.

(i) **Time Earnings.**

ADVANTAGES. Time earnings are said to be useful—

(*a*) Where the work is not standardized and is difficult to measure (e.g. repair work).

[1] It is conceivable that withholding labour for a short time *may* have the effect of a holiday and increase a man's efficiency on his return to work, and therefore the labour withheld not be entirely lost. But where the abstention is for an appreciable period or is accompanied by an inadequate allowance, or "dole," the reverse will be the case.

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(*b*) Where the work needs great care and minute attention.

(*c*) Where delicate and expensive machinery is used. In both (*b*) and (*c*) piece rates, if they led to " scamping " of the work, might cause serious loss.

(*d*) Where intervals of temporary idleness are inevitable (e.g. outdoor work dependent on weather conditions).

(*e*) In that the worker has a more regular income.

(*f*) In that where the time rate is a monthly or yearly salary, sickness does not necessarily mean loss of income. Further, a salaried worker (e.g. a civil servant) often acquires a higher status than one paid by results.

DRAWBACKS. The opponents of the system contend that—

(*a*) In the absence of safeguards, work may become slack.

(*b*) There is no inducement to full effort if the best and worst workers in one grade receive the same remuneration.

(*c*) It is difficult, for this reason, to select the superior men for higher class work.

(ii) **Piece Earnings.**

ADVANTAGES. It is maintained by the supporters of this method that payment by results—

(*a*) Adds an incentive to work and therefore increases output.

(*b*) Remunerates the worker for extra effort.

(*c*) Distinguishes the superior workers.

DRAWBACKS. It is pointed out that—

(*a*) The worker who produces the biggest *quantity* is not necessarily the most efficient. *Quality* of work is equally important. (*See* Advantages (*b*) and (*c*) of Time Earnings.)

(*b*) Piece rates cannot be satisfactorily applied to all kinds of work.

(*c*) Jealousy and rivalry are fostered between workpeople.

(*d*) Standard time rates are undermined.

(*e*) The worker's income is more irregular, which makes for instability of the family budget.

(*f*) Undue speeding-up and intensive labour adversely affect the worker's health.

On the whole, it may be concluded on the matter of time and piece rates—

1. That where the product and methods are standardized, piece rates have certain advantages and do not as a rule encounter material opposition from the side of labour.

2. That where the product and methods are not standardized, and a given effort cannot be depended upon to yield a given output, time rates are to be preferred, unless a system of payment by results is devised, whereby the wage is assessed collectively for a large group of workers, and shared out in such a way that variations in the tasks are levelled out.

OTHER METHODS OF REMUNERATION.

Several schemes have been devised to improve the system of remuneration, in effect to combine the advantages of both time and piece rates and minimize their drawbacks. The following are the chief methods that have been put into operation, with varying success.

(i) **Premium Bonus Systems.** These are of several kinds, but the general principle is to fix upon an agreed standard output with a guaranteed minimum (subject to certain conditions), and to pay a premium, reckoned on a piece basis, for output over that amount. The bonus may be calculated individually or collectively.

(ii) **Efficiency Systems of Payment.** These are linked up with **Scientific Management,** which involves a detailed study of the work, under either or both of two methods—*time-study* and *motion-study*. By the former method, a job that has to be priced is given to a "good average man, not a specially skilled workman, but one well above the ordinary run of the shop," or a number of such men. The average time taken forms the basis of the *efficiency rate*, which, like the premium bonus systems, allows a percentage for all output over the agreed standard. The method of motion-study aims at regulating the motions and minute operations of the worker in such a way that the work is done in the minimum time and with the minimum number of motions. Again, an efficiency rate is obtained, and output over the standard is paid for in the form of bonus. Generally speaking, the workers have opposed scientific management, especially where it has been applied very intensively. They object to the time-study method on the ground that the "good average man" may be well above the average, and that an unscrupulous employer or foreman may thereby speed-up the production beyond a reasonable degree. They object to the motion-study method in that it takes away a man's individuality and tends to reduce him to a mere automaton.

(iii) **Sliding Scales.** The payment depends partly on the output and the price of the finished product, though usually (in present arrangements) there is a minimum below which the wage cannot fall. The system is not prevalent; it was formerly practised in the coal industry, and still exists in some of the iron and steel trades. An inherent defect in such schemes is that the wage may fluctuate, though the efforts of the workers may not vary. Faults in management may to a certain extent be compensated by a reduced wage-bill. On

the other hand, the worker stands to gain when the product fetches a good price. But uncertainty of income is disadvantageous at all times to the wage-earner, more so than to the employer and interest receiver who are usually assured of the necessaries of life, whatever the fluctuations in their incomes.

(These sliding scales must be distinguished, of course, from the "cost of living" scales, which are mentioned below.)

(iv) **Profit-sharing.** A proportion of the profits is distributed among the workers, in the form of either cash or shares in the concern.

Co-partnership is a stage beyond profit-sharing. Besides participating in the profit, the workers are given a certain limited share in the control of the business; they may own some of the share capital and have one or two representatives on the board of directors. These schemes, which have not been generally successful, are considered further in Chapter XI, §2.

MINIMUM AND STANDARD RATES.

Standard Rates generally refer to the wages agreed upon in collective bargaining between the representatives of employers and employed (e.g. the elaborate "lists" in the cotton trades). They are, as a rule, calculated on a standard output, and take both time and piece factors into consideration.

The Minimum Wage may either be identified with the above or (as is usually the case) be associated with those industries where the labour organization is weak, and the workers have to depend on the State to impose and enforce a minimum rate.

The Trade Boards Act, 1909, provided such rates for certain "sweated" trades, viz., chainmaking, ready-made tailoring, paper-boxmaking, and lace-finishing.

In 1915–16, four other industries were brought within the scope of the Act. The machinery was a Trade Board, consisting of an equal number of workers' and employers' representatives, together with State nominees, and its decisions were legally enforceable.

The Act of 1918, which was wider in scope, was applied to several more trades, not as underpaid and unorganized as those first catered for. The new rates permitted a higher standard of life than those imposed by the early Trade Boards. Unfortunately, the period of falling prices and profits made it difficult in some cases to pay the stipulated minima, and led to an outcry from certain quarters for the abolition of the Trade Boards.

The Government Committee appointed to inquire into the subject drew a clear line between the functions of Trade Boards in respect of (*a*) fixing minimum rates of wages ; (*b*) regulating wages in general. It virtually recommended that a return be made to the principle of the 1909 Act (i.e. to provide minimum rates for the " sweated " and unorganized trades only).

In a White Paper (July, 1922), the Minister of Labour states that no Trade Boards shall be set up in the future unless the Ministry is satisfied that the rate of wages prevailing in the trade is unduly low, and that no adequate machinery exists for the effective regulation of wages ; existing Boards may be revised and further legislation is possible.

The present position is therefore rather vague, but any sacrifice of the general principle of the Trade Boards is to be deplored.

Wages Based on the Cost of Living. In the last few years, many workers (e.g. railwaymen, civil servants, etc.) have agreed to let their remuneration vary with the cost of living index figure. The principle is to have a constant *real* wage. While such a scheme has

its advantages, it has been objected that it tends to fix a man's real income, an increase of which is made more difficult. A minor objection, and one which can be remedied, is that the variation in the official index number does not correctly interpret the changes in the cost of living. (*See* " Index Numbers," Chap. XIII, § 1.)

Section 2. Theories of Wages

CAUSES OF INEQUALITY OF WAGES.

Wages from one occupation to another vary for the following reasons—

(i) *The Immobility of Labour.* This is of various kinds, as was pointed out in Chapter II, § 2. Grades of labour between which movement is comparatively difficult are termed *non-competing groups.*

(ii) *Conditions of Demand and Supply.* The supply of labour is limited by the time taken in training and by the slow growth of population. A demand for a particular kind of labour may lead to a high rate of wages (for a time at least) for those workers available.

(iii) *Relative Bargaining Strength.* The presence of an effective trade union or employer's association may mean a higher or a lower rate of wages than if competition were perfectly free.

(iv) *Custom and Tradition.* These play an important part in certain occupations (e.g. remuneration of solicitors and doctors).

To these should be added the five causes suggested by Adam Smith a hundred and fifty years ago.

(v) *The agreeableness or disagreeableness of the employments.*

(vi) *The easiness and cheapness of learning them.* [This is covered by (i).]

vii) *The regularity of employment.*
(viii) *The trust to be reposed.*
(ix) *The possibility of success.*

THEORIES OF WAGES.

Several theories have been propounded at different times, of which the following are the chief—

(i) The Subsistence Theory.
(ii) The Wages Fund Theory.
(iii) Productivity Theories.

These will be examined in turn, though it should be pointed out at the outset that no theory yet put forward offers a complete explanation of the determination of wages.

The Subsistence Theory of Wages.

This is sometimes known as the Iron Law of Wages, which is associated with Lassalle, the German Socialist. But it had been formulated in slightly different form by the Physiocrats as early as the eighteenth century. (*See* Appendix.)

In its earliest form, it stated that if the workers received more than a bare living, population would increase in consequence, competition for employment would become keener, and the wage would be dragged down again to the bare subsistence level. Alternatively, a fall below the subsistence level would cause a reduction in population and eventually lead to a rise in the wage. The writings of Malthus were used to support the theory. (Chapter II, § 1.)

Lassalle and his school, about the middle of the nineteenth century, adapted the subsistence theory, contending that under a capitalist system the employers and the landowners appropriated the whole of the social product in excess of the minimum amount necessary to keep the workers alive.

The appalling conditions in France and Britain during the eighteenth and early nineteenth centuries seemed to bear out the doctrine. Even to-day it would not be wise to ignore the element of truth contained in it. In some parts of the world (e.g. Egypt and India) the position of the mass of the people has not been improved despite the increase in the total wealth.

Criticism of Subsistence Theory.

(i) The theory rests on the false premise that an increase in wages leads to an increase in the population ; this is contrary to fact.

(ii) Real wages have undoubtedly increased in this country during the nineteenth century. The margin for comforts and luxuries has been gradually widened. " Subsistence " is a very elastic term.

(iii) It does not explain the inequality of wages in different trades and countries.

(iv) It is disproved by the influence of Trade Unions.

(v) Like the Cost of Production theory of value (to which it is allied), it tries to explain the exchange value of labour power from the side of supply only. (Chapter V, § 1.)

THE WAGES FUND THEORY.

This succeeded the previous theory, and was most fully developed by J. S. Mill, who stated—

(1) " That industry is limited by capital, but does not always come up to that limit, while the increase of capital gives increased employment to labour without assignable bonds." (*Principles of Political Economy*, Book I, Chap. V, §§ 1, 2, 3.)

(2) " It is not, however, all capital, i.e. all wealth saved and appropriated to reproductive employment, which constitutes the wages fund of a country, but that part only which is circulating as distinct from fixed, i.e. that part only which is destined for the purchase of labour." (Book II, Chap. XI, § 1.)

(3) This being so, " wages depend mainly upon the supply and demand of labour ; or as it is often expressed, on the

proportion between population and capital. With these limitations of the terms, wages not only depend on the relative amount of capital and labour, but cannot, under the rule of competition, be affected by anything else. Wages, meaning of course the general rate, cannot rise but by an increase of the aggregate funds employed in hiring labourers, or a diminution in the number of competitors for hire; nor fall, except either by a diminution of the funds devoted to paying labour, or by an increase in the number of labourers to be paid." (Book II, Chap. XI, § 1.)

In short, it was contended that at any time there is a fixed amount of capital to be devoted to labour; this is the Wages Fund, and is the *demand* for labour. There is also at any time a fixed number of labourers who must work whatever the rate of wages; this is the *supply* of labour. The fund is distributed among the labourers under the rule of competition. As in the Subsistence Theory, it was held that any rise in general wages would increase the population, leading ultimately to a fall in wages.

According to this theory, wages in one industry can only rise at the expense of wages in another industry. Should *all* wages rise for a time, it will be at the expense of profits, capital will be driven out, the demand for labour will therefore be reduced, and wages will inevitably fall again. (Hence a formerly popular argument against Trade Unions.)

Mill later qualified his theory, and eventually had to renounce it.

Criticism of Wages Fund Theory.

(i) Wages may be increased sometimes without a reduction in profits. The theory confuses wages with the cost of labour, and does not consider the possibility of increased efficiency and, therefore, productivity.

(ii) A fall in profits does not immediately drive capital out of an industry. Capital is not so sensitive and profits are by no means inelastic.

(iii) Wages may be high in one trade and low in

another, and the immobility of labour be strong enough to prevent a "flow." The theory credits the workers with greater adaptability and fuller knowledge of the labour market than they possess.

(iv) It does not explain inequality of wages in different trades.

(v) It is disproved by facts. Wages are often high in new countries where the amount of capital is small and population is increasing. In times of good trade, wages and profits both increase—obviously the result of a greater productivity, the failure to recognize which has been shown to be fatal to the Wages Fund Theory.[1]

PRODUCTIVITY THEORIES.

According to these theories, wages are paid not out of a fixed fund, but rather from a "continuous stream," the volume of which varies with the general efficiency. Stress is laid on increased efficiency and output, the wage being proportionate to the worker's productivity. The theories are therefore not so pessimistic as those which held that a rise in one man's wage must necessarily be at the expense of another worker's income.

Before considering the most modern productivity explanation of wages, a word may be said about an early form of the theory, namely, the **Residual Claimant Theory of Wages,** in which the worker was looked upon as the *residual claimant* on the net product.

"The wages of a working man are ultimately coincident with what he produces, after the deductions of rent, taxes, and the interest on capital." (Jevons.)

If this were true, extra efficiency on the part of the workers would mean not merely a larger *amount,* but a larger *share,* of the social product. But this is not

[1] The Wages Fund Theory compares in certain respects with the belief that some workers hold in the "*Work Fund.*" (Chap. XI, § 1.)

in accordance with the facts which are evident to the most casual observation. The same theory of the residual claim has also been applied to the other agents of production, so the explanation cannot be considered satisfactory.

Higher and Lower Limits to Wages.

The supply of labour is practically fixed within a short period, and as labour will not " keep," it must be offered for sale (apart from such eventualities as strikes, etc.). The minimum price for labour that can be accepted, however, is the minimum **Standard of Life.** Here, therefore, the theory of value as applied to wages must be qualified. If the supply of water is practically unlimited, the price falls almost to *nil*; but if the potential supply of labour were unlimited, it would be clearly impossible to pay wages over a period below the subsistence level. The earlier theories failed to distinguish between population and the supply of labour. Human beings are loth to accept a value placed upon their efforts which will not provide the elementary necessaries of life.

From the point of view of the demand for labour, it is obvious that the *maximum* that will be paid for it is determined by the worker's contribution to the product. It is assumed in the productivity theories that there is a *specific product* ascribable to labour, capital and land, and that each tends, under free competition, to receive a reward proportionate to its own specific addition to the product.

The *Principle of Substitution* is very important in this connection. The entrepreneur aims at employing the various factors in just those proportions that will render the maximum productivity. If the wage demanded is higher than the value of the specific product of labour, the result must be either dismissal of some workers and

(unless effective substitution of machinery is possible) stoppage of production.

In modern times, Trade Unions and Employers' Associations have had great influence on the actual rates of payment, and competition therefore has not been so free as pure theory might imply.

For the present, it may be stated that **wages fluctuate between the minimum set by the standard of life and the maximum set by the productivity of the worker, according to the bargaining strength of the workers and employers respectively.**

THE MARGINAL PRODUCTIVITY THEORY OF WAGES.

This theory is simply an application of the marginal utility theory of value discussed in Chapter V, § 2. The wage that is paid to labour is governed by conditions of supply and demand, subject to certain reservations.

A similar line of argument is followed. Suppose an employer to be taking on men for a particular grade of work. Whatever the industry, diminishing returns per man employed will apply *after a certain point*, though the men themselves do exactly the same amount and quality of work. A stage is reached when an additional man yields no more than the wage paid; i.e. it will not pay the employer to take on any more men. But as the men are "interchangeable," the employer will not pay a rate of wages higher than that measured by the output of the marginal man, or rather (for reasons explained in the chapter on Value) by the value of the marginal product. In the same way, it can be shown that there is a marginal supply price of labour, which, however (on account of the peculiarities attaching to the nature of labour—*q.v.*), is more subject to

qualification. If the wage is raised, the supply of labour cannot be appreciably increased; if the wage falls, the supply of labour cannot appreciably diminish.

A very general statement would be that **the wage for any industry tends to equal that amount at which the marginal worth of the labour to the employers and the supply price on the part of the workers are equal.**[1]

If wages fall below this level, competition among the employers may force the price up; if it rises above the level, competition among the men may force the price down.

"**Wages are the Discounted Marginal Product of Labour.**" A refinement of the Marginal Productivity Theory is the application of the conception of Discount. Production takes time, and workmen have not the means to wait until their product is marketed and paid for. Employers advance these means during the long period of production, the difference between the future and the present worth of labour constituting the gain to the employer. As will be shown in the theory of interest, things in the present are preferred to things in the future. This implies that if something is to be worth £105 in a year's time, its present worth may only be £100. The difference is an interest or discount, from whichever standpoint one regards it. A man's wage, according to this theory, is equal to the value of the marginal product *less* the interest on the wage from the time it is paid to the time when the employer receives payment for the goods produced.

[1] The marginal method is not without its critics. Mr. J. A. Hobson contends that "marginal productivity turns out to be nothing other than an average productivity," and that the notion of the marginal increment playing "any special part in determining wages for members of the group, is entirely fallacious." (*Industrial System*, p. 116, 1910 Edition.) This criticism is considered by Dr. Marshall in his *Principles of Economics*, 8th Edition, pp. 409–10*n*, 517*n*.)

PROVISIONAL CONCLUSIONS ON THE THEORY OF WAGES.

While the Marginal Productivity Theory approximates to the truth more nearly than the earlier theories, certain qualifying factors have to be taken into consideration.

(i) The theory assumes a system of *free competition and mobility* not to be found in actual practice. It is not the case that if an employer can pay more, he will always be driven by competition to do so. Similarly, a worker may be receiving more than he would be prepared to accept under less favourable conditions. The *economic friction* is too strong to permit of automatic immediate adjustment, though in the long run the tendency is more evident.

(ii) The *standard of life* has a very important bearing on the determination of wages, particularly with reference to minimum rates.

(iii) The term *productivity* is rather vague. Does it mean output of goods or merely of market-value? The latter *may* depend on the former or it may not. Again, if some things change in market-value after production, is the labour thereby more productive?

"This distinction is often forgotten, and the productivity theory of distribution comes to be used (unconsciously perhaps) as a justification of the present unequal distribution of the national income. Each, it seems to show, gets what he produces; what could be fairer? It is forgotten that the market value by which this productivity is measured bears no constant relation to social service. The theory is true (if at all) only if we give 'productivity' its second meaning, 'productivity of value'; the theory justifies the present distribution (if at all) only if it has the first meaning, 'output.' In the only sense of the word 'productivity' in which the productivity theory of distribution is true, the man who receives £3 per week for looking after Pekingese puppies for an American countess is four times as productive as the Oxfordshire farm-labourer receiving 15s. a week; the services of the two to society do not bear the same relation."[1]

[1] H. Clay, *Economics for the General Reader*, pp. 319–20.

Though the theory is still incomplete, it gives valuable indications of the influences on wages. A rise in efficiency means an increase in the marginal worth and therefore a rise in the wage. One industry pays a higher wage than another because the marginal productivity is higher (i.e. the "productivity of market value"). For the same reason, one country may pay a higher *real* wage than another. Further, an increase in wages may accrue to improvements in the organizing ability of the entrepreneur, and also to inventions and discoveries of new resources.

Trade Unions and Wages. The subject of Trade Unions will be considered in Chapter XI. It may be stated in the present connection, however, that where the wage paid is actually lower than the value of the marginal product, Trade Unions may be able to force the wage up to that level and keep it there. *For a short period*, organized labour may actually compel wages above that level; but *in the long run*, when adjustments can be made, it will not pay to employ labour at a remuneration higher than the value of the specific product. Similarly, combination of employers may force wages below the level in the absence of combination of labour. The length of the period in this case depends on the strength of the respective parties.

As the subject of wages is bound up with interest, profits, and rent, further conclusions are deferred until these have been considered.

CHAPTER IX

INTEREST AND PROFITS

Section 1. *Interest*

ANALYSIS OF INTEREST.

Interest is the price paid for the use of capital, and must be distinguished from Profits, which are the return to the entrepreneur for his services.

In practice, however, there is often a strong element of profits in ordinary interest. The recipient of a higher interest from a South American concern than from a British railway company claims the higher dividend as the reward of the greater risk he has incurred. Accordingly it is necessary to make a distinction between *Net Interest* and *Gross Interest.*

Net Interest is the payment made for the use of capital, without any allowance for risk or any other factor. It is almost impossible to find actual instances of this pure return; but, for practical purposes, interest on British Government Stock and similar gilt-edge securities may be taken as a near approximation.

Gross Interest is the inclusive return to an investment of capital, and may be analysed thus—

(*a*) Net interest.

(*b*) Reward for risk.

(*c*) Payment for possible inconvenience incurred in the outlay, book-keeping, etc.

VIEWS ON INTEREST. THE EXPLOITATION THEORY.

Interest was regarded as unjustifiable by early writers. From Aristotle down to the Middle Ages, philosophers

contended that money was " barren," that it could not breed money. The Church forbade usury, which was also legally prohibited. (*See* Appendix.)

The usury laws were not successful. People were continually requiring money and offering a payment for its use. With the Industrial Revolution, the need for capital was intensified, and the State, realizing that the usury laws were anachronisms, belatedly followed Bentham's advice and repealed them in 1854.

The objection to interest in the past can readily be understood. Capital was not used in the same way and to the same extent as now. Money borrowed was consumed " unproductively " more often than not. There was little to be seen as a result of the consumption, and therefore nothing apparently to justify the payment of interest.

Later, the importance of capital in production increased and became recognized. But the dispute over interest was by no means settled. Rodbertus, Marx, and other Socialist writers, frankly regarded interest as theft, taken from the " surplus value " created by labour. But, as implied above, interest is the return to capital as a *factor*. The *ownership* of the capital is quite another matter. Should all the capital in the country be nationalized, the money-equivalent of the extra product due to that factor (i.e. the interest) would be collectively owned instead of going into private pockets. Socialism might prevent the *payment* of interest, but that would not abolish the existence of the extra product due to the employment of capital.

THE PRODUCTIVITY THEORY.

It used to be contended by early economists that in the same way as land produces crops, so capital produces interest. The early form of the theory attributed

to capital a productive capacity *per se*. Where a loan took the form of livestock, there was an obvious specific productivity. But in the modern form of capital, such a power of production on its part was not so easy to prove. A man working by hand turns out so many units; with the aid of a tool he doubles his output. Is the *extra* output the return to the tool or to the labour? It is not due to the tool alone, which is useless without labour, nor to the particular man's labour alone, but to the general social forces that brought the tool into existence. But whoever gets the fruit of the employment of capital, it must be admitted that by its use production is increased.

The Productivity Theory contains much truth, but it does not account for the payment of interest on such capital, which, for different reasons, has not yielded any product at all. It tries to explain interest from the *side of demand* only. Other fallacies can be deduced by comparing this theory with other one-sided attempts to explain value.

THE ABSTINENCE THEORY.

According to this theory, interest is said to be the reward of abstaining from the immediate consumption of capital. As the word "abstinence" might be taken to imply some sacrifice, which in the case of very wealthy lenders can hardly exist, the phrase "reward for waiting" is sometimes preferred. Applying the "marginal" conception to this theory, it is shown, by steps similar to those adopted before, that, *on the supply side*, the estimate of the marginal investor (i.e. the "abstainer" who is just persuaded to save the marginal investment) *tends* to equal the rate of interest.

This view of interest is true up to a point, but it cannot be considered complete. Though productivity is not

the only, it is an important, factor in the explanation of interest, and the Abstinence Theory pays it insufficient attention.

THE "AUSTRIAN" THEORY OF INTEREST.

This theory attempts to show what it is that determines the rate which is just sufficient to induce the supply of the marginal investment. It is usually associated with Prof. von Böhm-Bawerk, one of the "Austrian" or psychological school of economists.

The fundamental reason for interest, it is maintained, lies in the fact that *a man prefers present satisfactions to future satisfactions.* If he is offered the choice of £100 in a year's time or now, he will prefer it in the present, *quite apart from any consideration of risk* (which is rewarded by a return to enterprise as distinct from interest). If he were offered the choice of £103 in a year and £100 now, he might still prefer the latter. But £105 in a year's time and £100 now might be equally attractive; a point of indifference has been reached. The sum of £5 represents the loss in value that he experiences by postponing the consumption of £100 worth of goods for one year. It is this "surplus" of present values over future values that determines the nature of interest.

The explanation thus rests on a psychological basis, and resolves itself into the formula, "*Interest is the price of time.*"

This *agio* theory, as it is sometimes termed, while probably nearer the truth than the earlier explanations, tends to regard interest too much from the side of supply. Again, one must emphasize that no theory relying mainly on one set of factors, whether of supply or demand, can be a complete explanation of any value.

PROVISIONAL CONCLUSIONS ON THE THEORY OF INTEREST.

Like the other shares in the distribution of the social product, the total *volume* of interest paid corresponds to the productivity which capital bears to the other agents of production. Each factor tends to be employed in just those proportions that render the maximum net return to the entrepreneur.

With regard to the determination of the *rate* of interest, the following conclusions seem to approximate to the truth:

By the use of capital, production is increased. If wealth is not borrowed for productive purposes, but for "unproductive consumption," the loan nevertheless confers a service. These between them constitute the demand for capital.

But capital, like anything else, is subject to the law of diminishing utility. A manufacturer may find that the 10th unit of £1,000 yields less product than the 5th £1,000. The greater the supply, the lower will the marginal productivity become. **From the side of demand, the exchange-value of the use of capital (i.e. the interest) tends to equal the marginal utility as measured by the value of the product.**

The stock of capital depends upon the power and the will to save (Chapter III, § 2). The rate of interest has a great influence on the accumulation of capital, though a certain amount of wealth would be conserved in any case.[1] As a general rule, however, it may be stated that **from the side of supply, the rate of interest tends to equal the reward to the marginal investor, or better,**

[1] It has been pointed out that a low rate of interest, instead of checking saving, may cause those people who wish to save for old age, etc., actually to increase their savings, so that the future sum be not less than first anticipated.

tends to equal the estimate placed upon the marginal investment, as determined by the relative valuation of present and future goods.

The rate of interest tends ultimately to the point at which the marginal productivity of the capital and the estimate upon the marginal investment, both as measured in money, are equal.

Section 2. Profits

ANALYSIS OF PROFITS.

In the early stages of economic analysis, the entrepreneur and the capitalist were regarded as identical, and therefore no real distinction was drawn between interest and profits. Later it was recognized that, while one man might serve as both capitalist and entrepreneur, he was really performing a double function, namely, supplying the use of capital, and providing organization and enterprise. Indeed, it is seldom that a man acts as entrepreneur without supplying a certain amount of capital also. In the same way, the average investor of capital undertakes a certain amount of risk, and expects a return over and above the rate of pure or net interest commensurate with the amount of risk taken. It was seen above that in the ordinary or gross interest there was an element of profit.

In order to discover the nature of real or pure profit, the ordinary profits of a business may be analysed. Returns to some or all of the following elements may be found—

(i) **Payment for Organization or Management.** This is a reward for the duties carried out by the entrepreneur. In a sense, it resembles the remuneration he would receive if he acted as a paid manager, and is thus akin to wages. The gross earnings of the entrepreneur cannot permanently fall below the "wages of

management " (though allowance must be made for the advantages of the employer's position compared with that of a paid manager). If they did, and provided that stocks and plant could be realized, he would find it more remunerative to become a salaried organizer.

(ii) **Payment for Risk.** Since production has to be carried out usually in anticipation of demand, there is always a certain amount of risk involved. Long before the final product is paid for by the customer, money has been paid out for wages, materials, and borrowed capital, etc. The most skilled of entrepreneurs may have their estimate of demand upset by factors that cannot be foreseen.

(iii) **Net Interest.** It was seen above that the " small " man tended to " lump " all his returns in one gross revenue. But, as the business grows, and capital and land are hired, interest and rent for their respective use are ranked as working expenses, not as profits. Debenture-interest has a higher percentage of net interest than the dividend paid on ordinary shares. The proportion of pure profit in the gross interest increases as one passes from bonds and debentures through the various kinds of holdings until the deferred shares are reached. (*See* Chapter XV, § 2.) The last are the most speculative and therefore have the biggest reward for risk; but there is a certain element of pure or net interest.

(iv) **Monopoly Gains.** A firm that has definite monopolistic advantages may charge a price considerably higher than the cost of production. The profits thus contain an element surplus to what would be considered the normal profit.

(v) **Pure Profit.** It was noted in the discussion on value that the marginal cost of production tended to equal the price, and that the marginal cost had to include a certain amount of profit; otherwise there

would be no reason for the firm on the margin to carry on. This may be called the *normal* rate of profit. But the more efficient and better organized firms receive an extra return which is obviously of a different kind from the profit of the marginal firm. This differential gain is a form of profit, which is distinct in nature from the normal profit, much more so from the wages of management and the reward for risk.

An important difference between monopoly gains and pure profit may be observed. Monopolies derive their " extra " profit from charging monopoly prices (Chapter VI, § 2). Pure profit is derived from selling the product at the market price determined by ordinary competition. While monopoly profit is extorted by economic power and privilege, pure profit is the result of superior efficiency.

It will be shown in the next chapter that the " differential gain " is very analogous to economic rent.

PROVISIONAL CONCLUSIONS ON THE THEORY OF PROFITS.

The basic element in profits seems to be that " normal " rate which the firm on the margin must receive over a period or cease producing. It is difficult to estimate what this is to be, as it depends on so many varying factors. The nature of the industry is one, the age of the firm is another.[1] It cannot be said that profits

[1] Firms in a new industry may make higher profits in the early years than later, for the following reasons—

(*a*) The fact of getting a start over the others gives a certain advantage and profit.

(*b*) Starting a new business requires a higher class of organizing ability than conducting one already established.

(*c*) The number of competing firms is smaller than it may be later.

(*d*) On the other hand, a greater risk is incurred ; but where the industry succeeds, the profits at first will be all the higher.

tend to an equality any more than wages, but there appears to be in every trade a certain minimum profit below which, taking everything into consideration, a firm will not carry on for long.

The term " profits," therefore, allows of more than one interpretation. From different points of view, profits may be regarded, on the one hand, as the reward of enterprise and risk, and, on the other, as consisting of the " normal " profit and (if the firm is above the margin) a certain differential advantage. Thus there remains even after the rewards for organization and enterprise, interest, etc., have been deducted, a *dual element* which does not admit of simple analysis.

The inquiry into profits is necessarily incomplete at the present stage; final remarks are impossible until the theory of rent has been examined. It will be shown that the implications of the rent doctrine help one to understand the system of distribution as a whole.

CHAPTER X

RENT AND ITS APPLICATIONS

Section 1. *The Theory of Rent*

THE MEANING OF ECONOMIC RENT.

Rent in the economic sense denotes the payment for the use of the natural factor of production.

As defined by Ricardo a century ago, " it is that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil." Dr. Marshall widened the definition to signify " the income derived from the ownership of land and other free gifts of Nature."

Rent must be distinguished from the ordinary application of the term. Payment for the use of buildings or agricultural land includes not only a certain amount of pure rent, but also important elements of interest, profits, depreciation allowances, etc. The payment for the use of a house is *hire* rather than rent. The true economic rent may only be a very small proportion of the hire value.

Another distinction is necessary. With regard to the recent shortage of houses, people were unwilling to build them unless they could get what was loosely termed an " economic rent." This meant, of course, that they expected a fair return for the capital and labour and enterprise they put into the construction of houses. For a house that cost £1,000 when the rate of interest was 5 per cent, the interest alone would be £50 per year. But, as pointed out, the pure economic rent would be the payment for the land on which the

house was to be built, though not necessarily equal to the ground rent, which, if fixed for a number of years, may be above or below the real economic worth of the land.

PECULIARITIES OF LAND.

Land is strictly limited in quantity. It is different from the other factors of production in that it is permanent, that no change in demand can affect the stock of land in existence.

But though the actual amount of land is fixed, its services as a factor of production have been greatly increased. Fertilizers have added to the quality and quantity of output; improvements in transport have made available certain regions whose products were not available hitherto.

Land may be of the following types—

(*a*) Possessing only natural or original powers of production (e.g. virgin land in a "new" country, not requiring any preliminary clearing, etc.). In an "old" country, very little of this land is to be found.

(*b*) Possessing, in addition, the powers of production that have been added to the elementary qualities (e.g. by fertilizers, clearing of ground, improved transport, etc.).

(*c*) Possessing also such attributes as are owing to the social action and pressure of the community. This applies more to the situation than the fertility of land (e.g. valuable sites in the centre of a city).

THE RICARDIAN THEORY OF RENT.

Ricardo[1] believed in the cost of production theory of value, which he attempted to apply to the agents of production. The subsistence level was held in effect

[1] *See* Appendix.

to be the " cost of production " of labour ; interest as the inducement to people to abstain from consumption was the " cost of production " of capital. But when the theory was extended to land, many difficulties arose. Land is not produced : its amount is constant whatever price is offered. Ricardo, therefore, sought another explanation of the return of the social product that goes to land, and his theory, with certain important modifications, is still generally maintained.

The earliest and crudest form of the theory may first be examined. Imagine a limited area of virgin land to which come a number of settlers. Presumably these will appropriate the most productive land, which yields, say, 100 bushels of wheat for a given amount of land and labour. Suppose all the best land has been appropriated, and some more settlers arrive. The latter are at liberty to take up the second-best land, which for the same area and labour yields 90 bushels of wheat. Alternatively, they might approach the first-comers and ask them on what terms the best land can be rented. If no capital has been invested in the superior land, the owner will ask a rent equivalent to 10 bushels (i.e. the difference in the productivity of the two lands). At that point it is a matter of indifference to the newcomers whether they cultivate the second-best land paying no rent, or take over the best land and pay a rent of 10 bushels. From the point of view of the owner of the best land, if he asks a lower figure, competition among the new arrivals for his land will force the price up ; if he asks a higher figure, they will prefer to cultivate the inferior land rent free.

Suppose all the first- and second-class land to be appropriated and that further settlers arrive. These may take up rent-free the third-class land which yields 80 bushels for the given area and labour, or pay the

owners of the second-class land a rent of 10 bushels, or the owners of the first-class land a rent of 20 bushels. Thus, increasing pressure on the limited amount of land causes the rent to rise *without any effort on the part of the owner*. The superiority in productive powers that one piece of land has over another corresponds in amount to the rent.

Importance of Situation.

This purely imaginary illustration is brought a little nearer to actual conditions if with the *fertility* of the land is included its *accessibility*, which Ricardo did not stress. In such an instance as the above, the settlers would probably appropriate the land most available. The reason might be ignorance of where the most fertile land was to be found. But even if this were known, it might not pay to cultivate it on account perhaps of the expenses of transport. If the most fertile land bore an advantage of 10 bushels over the land immediately available, but necessitated an expenditure equivalent to 20 bushels in transporting the crop, the *net product* of the less fertile land would be higher than that of the more fertile land, and would yield consequently a higher rent.

Rent of situation, therefore, must be considered alongside rent of fertility. It will be seen that in thickly populated districts, situation counts for more than fertility; in cities, fertility (in the ordinary sense of the word) counts for practically nothing.

Diminishing Returns and Rent.

It was shown in Chapter III, § 1, that land, after a point, is subject to diminishing returns. The reason why *intensive* cultivation is not carried on as much as possible is that the extra return may be less than the extra cost of getting it. Where *extensive* cultivation is possible, the farmer covers a comparatively large area of

land and finds that the returns to his outlay do not diminish so quickly as if he were working intensively.

Rent is seen to emerge again in this connection. Equal " doses " yield a diminishing return, and the differences in their productivity are equivalent to a rent.

As was emphasized in the section dealing with diminishing returns, the " doses " of capital and labour applied may be *successive* or *simultaneous*, and still be subject to diminishing returns. Some doses have, therefore, a differential advantage over others, though in themselves they are equal in quality and quantity.

THE DETERMINATION OF RENT.

Having discussed the nature of rent, one next examines the way in which its amount is determined. It is not sufficient merely to say that it is measured by the difference in productivity. Consider, first, lands of varying fertility. Land A may have an advantage of 10 bushels over land B, which has an advantage over land C of the same amount. The advantage of A over C is, therefore, 20 bushels. There may be several other qualities of land, D, E, F, etc., all of which are found profitable to cultivate. This means that the rent on A will be much higher than a sum equivalent to 20 bushels. Which land serves as the basis for final comparison and measurement of rent ? The answer is *the land on the margin of cultivation*, i.e. the land which, at the price of the product ruling at the time, is just worth while cultivating. To put it another way, the receipts from the product of the marginal land just cover the expenditure of the labour and capital applied ; there is no surplus. As demonstrated in the chapters on Value, it is the cost of the marginal product which indicates the price of all the product. Whether it is grown on the more productive or less productive land, the crop

(assuming the quality is the same) is sold at the price which is necessary to cover the expenses of the marginal product. For lands of varying productivity, there is said to be an *extensive margin.*

Secondly, with regard to different " doses " applied, the cultivator of one piece of land tends to invest capital and labour up to that point where the return just covers the outlay. As stated in the form adopted in the general discussion on value, he tends to produce up to the point where the marginal costs equal price. For doses of capital and labour of varying productivity, there is said to be an *intensive margin.*

The extra productivity of the superior over the marginal unit, whether the units be different grades of land or " doses " of capital and labour applied, determines the amount of the rent.

If the price of the product rises, then it is profitable to cultivate the land or employ the " dose " of capital and labour that previously yielded less than the outlay. The margin is thus lowered, which means that the differential advantage or rent of the superior unit is raised.

If the price falls (say, for reasons of foreign competition), it is no longer profitable to cultivate or employ what until now has been the marginal unit. The margin is therefore raised, and the differential advantage or rent of the superior unit is reduced.

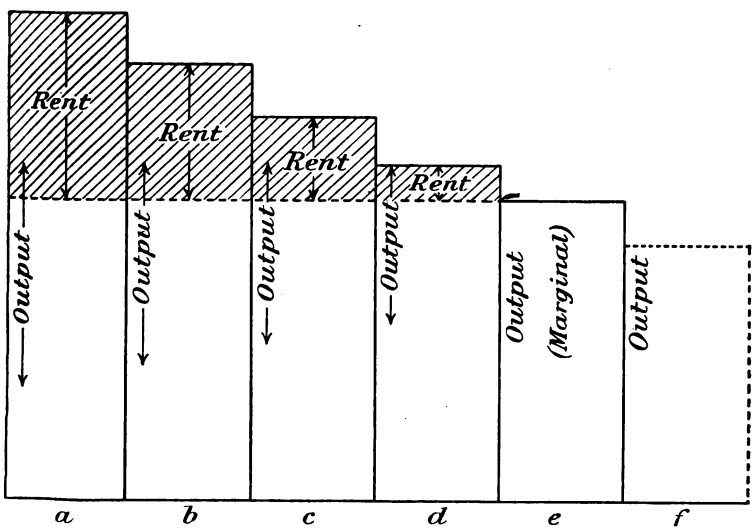
As a general rule, a rise in the price of the product causes an increase in the rent; a fall in the price causes a reduction in the rent.

In practice, the rent paid for land (quite apart from allowance for interest, etc.) does not usually rise or fall automatically with the price of the product, since rents are usually fixed by contract for a definite period, and any advantage or loss within that period accrues to the

tenant. But this does not disprove the increase or decrease in the true rent. *If a long period be taken, to allow time for contracts to terminate, the money rent (deducting interest, etc.,) will approximate to the pure economic rent.*

DIAGRAMMATIC ILLUSTRATIONS OF THE NATURE AND DETERMINATION OF RENT.

The foregoing analysis may be illustrated thus—



(i) Suppose the rectangles represent the *output from lands of different fertilities or situations, of equal area, and for equal combined units of capital and labour.* The most productive land yields an output measured by rectangle *a*. The second-best land yields a product measured by *b*, the third yields *c*, and so on. Remembering that the price of the product is fixed for the

cultivator by the general conditions of supply and demand, suppose that the price is just sufficient to induce the cultivation of that land which yields an output of *e* per given unit of capital and labour. Obviously it will not pay to cultivate the less productive land which only yields *f*. The land which just yields sufficient to cover the outlay is on the margin of cultivation. The difference between the productivity of the superior and the marginal land is the rent, marked by the shaded portion of the diagram.

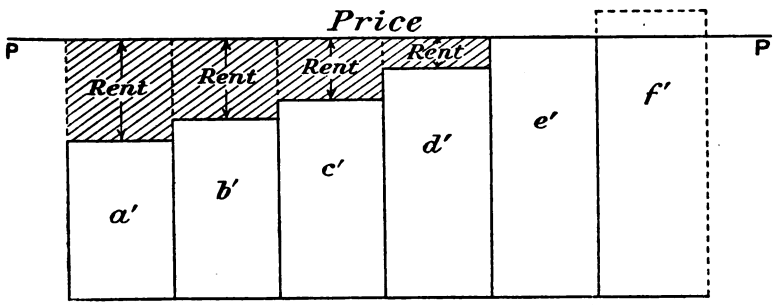
If the price of the product rises, then the sixth land may be brought into cultivation ; *f* becomes the marginal product, and the rents rise. If the price falls, the fourth land becomes marginal and the rents fall.

(ii) Referring to the same diagram, suppose the rectangles to represent *the output from equal combined units of capital and labour applied to the same piece of land.* The illustration is now similar to that of diminishing returns. One unit of capital and labour yields a product measured by *a*. The second unit produces *b*. If two units are applied together, the yield is $(a + b)$, i.e. less than $2a$. The fifth unit yields *e*, the sale of which just covers the cost. Assuming that the cultivator knows exactly where to stop (often it is impossible to calculate this precisely), no more than five units will be invested. The " surplus " product of each of the first four doses over the product of the fifth or marginal dose is equivalent to a rent. As before, a rise or fall in the price of the product will cause a rise or fall in the rent.

(iii) A shorter way of demonstrating the nature of rent is as follows—

The law of diminishing returns may be otherwise expressed as that of increasing costs. In this diagram, suppose a' to be the cost (including minimum profit) of

producing one unit ; b' the cost of producing a second unit ; and so on. The price at which all the units are sold is measured by the line PP. As before, e' is the marginal cost. The shaded area between a' and PP is a rent, which also accrues in diminishing degree to b', c', and d'. The price just covers the cost e', and in



this case there is no rent. To produce another unit would cost f', which is higher than the price received.

"NO RENT" LAND.

The Ricardian theory of rent leads to the conclusion that land on the margin of cultivation pays no rent. It is sometimes contended, however, that in actual fact no such land exists, in England at any rate. Granted that, except in the very new countries, all the land is taken up and that the worst land demands some money payment, this does not necessarily contradict the conclusion arrived at above. Payment for the worst land can be explained in more than one way—

(i) The marginal land which determines the rent payable, say, in England, need not be in this country; it may be in America. Farmers here compete with

American producers, and the price is governed very largely by foreign competition. As the price rises or falls, rents at home vary accordingly ; and if the worst land here is superior in productivity to the marginal land in America (allowing for the cost of transporting the American produce, which has to be deducted from the gross output), it will yield a rent. Thus in an old country, all the land may bear a rent.

(ii) A second reason for the payment for the worst land in England may be that a certain amount of capital has been sunk in it, and the payment therefore for its use consists partly of interest.

(iii) A tenant of a fairly large area cannot pick and choose, and pay rent only for the fertile tracts. Part of the land may be quite unproductive, but an inclusive rent is paid. Actually it is for the productive tracts ; nominally it is for the whole area. Thus the fact that no rent is paid for the non-productive land is concealed.

Alternative Uses of Land.

One modification of the Ricardian theory was seen to be the recognition of situation in addition to fertility. Another qualification to be made is in connection with the different uses to which land can be adapted, quite apart from its productive powers in the ordinary sense. Land may be used for growing wheat or barley ; or it may serve for arable or pasture purposes ; or it may be used for urban office and housing construction ; or it may be taken for pleasure parks and game preserves, or for purposes of social position. Each use has its margin, and under the present system is adapted to that purpose which yields the biggest revenue. In some of the uses put to land, it is particularly evident that exchange-values are no true index of worth to the community. " The ' pheasant margin ' may be higher than the ' peasant margin.' "

For some of these purposes, dependence upon foreign supply is impossible. Englishmen may consume wheat grown on American land ; but for social prestige, sport, and recreation, it is only land at home that matters. The owner of such land can make a charge which is not so much a differential as a *scarcity rent* (though it may be argued that all rents, in a sense, are scarcity rents). Hence another reason for the absence of " no rent " land.

RENT DOES NOT DETERMINE PRICE, BUT PRICE DETERMINES RENT.

This deduction is the result of Ricardo's analysis. He wrote—

"The value of corn is regulated by the quantity of labour bestowed on its production on that quality of land, or with that portion of capital, which pays no rent. Corn is not high because a rent is paid, but a rent is paid because corn is high ; and it has been justly observed that no reduction would take place in the price of corn although landlords should forego the whole of their rent. . . . Rent does not and cannot enter into the least degree as a component part of its price."

The doctrine, with certain important reservations, may be extended to the price of things besides agricultural produce.

Briefly the steps in the argument are—

(*a*) Producers sell their goods for what they can get and not as cheaply as their expenses permit.

(*b*) The price tends to equal the costs of the marginal producer (or the marginal product).

(*c*) The position of the price fixes that of the margin, which pays no rent.

(*d*) Producers over the margin receive a rent which increases or decreases with a rise or fall in the price.

(*e*) *Therefore, the rent is the result of the price, and not a cause of it.*

Applied to *urban rents*, the same conclusion is broadly

true. (Again, one must bear in mind that the heavy interest and other charges on the enormous capital invested in buildings have to be deducted before the true rent is ascertained; in large cities, the proportion of pure differential rent to the interest charges, etc., is very small.) A shopkeeper in a fashionable thoroughfare does not charge high prices because his economic rent is high. *The economic rent is high because he is able to charge high prices.* As far as the consumer is concerned, the pure rent does not enter into the price. If the payment of net rent were abolished, the shopkeeper could and would still keep the price up, and gain the advantage. In any case the consumer would not benefit [but see qualification (i) below].

Generally speaking, interest has to be paid to induce a supply of capital, wages have to be paid to induce a supply of labour; but the supply of land cannot be increased or decreased by a higher or lower rent. Interest and wages help to govern the price of the product, rent has no such influence.

Qualifications of this Doctrine.

(i) While *particular* rents do not enter into the price, the same is not true of *total* rents. If rents were abolished, the tenant would get the advantage, not the customer. But if the rents were given over to the State, the produce of the whole country could be "pooled." The commodities produced with the greatest expense could be sold at less than the cost of production, the loss being compensated by the gains on the commodities that are produced at less expense than the selling price. Thus prices could be lower if the rents were socially instead of privately received. The statement, therefore, that rent does not enter into the cost of production is not true, if rent and cost of production are considered *as a whole.*

[An alternative plan that has been suggested is to tax the "*unearned increments*." If rent does not enter into price, a tax on it cannot be shifted on to the consumer. Many difficulties present themselves in practice (e.g. the distinguishing between interest on sunk capital and pure rent). But over a long period, capital improvements become "absorbed" by the land, and the total charge closely resembles a real rent. *See* Chapter XX, § 2.]

(ii) Where the land can be used for more than one purpose, the rent may be a factor in deciding which use will be made of it (*cf.* arable and pasture). It therefore helps to fix the margin of cultivation for one product or another, and in that way tends to settle the price of the marginal product. To this extent, rent may enter into price.

BRITISH AGRICULTURE AND RENTS.

The operation of the law of rent has been evidenced very clearly during the nineteenth and twentieth centuries. During the Napoleonic Wars, the shortage of corn supplies, combined with the high tariffs on imported corn, contributed to a considerable rise in price. Landowners and farmers made large incomes, and found it advantageous to cultivate the inferior land, hitherto below the margin. The rise in price thus lowered the margin of cultivation and raised the rents of the superior lands. Many farmers, thinking the good times would continue, heavily committed themselves financially. When the war ended (1815), prices gradually declined and, despite the protection afforded by the Corn Laws, several farmers were ruined. Rents fell with the prices.

During the nineteenth century, whenever prices of corn rose or fell, rents moved likewise. The Crimean War, the United States Civil War, the Franco-Prussian

War, by cutting off foreign supplies and for other reasons, all helped to raise the price of corn, and rents rose in consequence. When, after the 70's, foreign corn came into Britain in increasing quantities, the price fell continuously, and so did the rents. Hence the so-called "Agricultural Depression."

During the recent war the same process has been gone through. Reduction of foreign supplies and increased demands on our own produce caused prices to rise. The productivity of the land resources at home was increased, for, apart from Government compulsion, the high prices made it profitable to cultivate relatively inferior land and also to cultivate more intensively; the general result was a rise in the economic rent. State control of money rents and prices complicated matters, but did not hide the real tendency. Since the war, some land has gone out of cultivation; the margin has therefore risen, which means a fall in the net rents. The period is too short for the natural consequences to work themselves out, especially as many long-dated contracts have been made. But sufficient has been said to show the practical operation of the general principle.

SUMMARY OF INFLUENCES ON RENT.

The principal factors influencing rent may be shortly summarized.

A Fall in Rents may be Due to—

(*a*) Improvements in methods of cultivation. There is less resort to inferior lands, the difference between the best and worst land under cultivation diminishes, and therefore rents tend to fall.

(*b*) Improvements in transport. These have the same effect. American corn is brought into this country and makes the use of the worst land in cultivation

unnecessary. Similarly, railway and other travelling facilities may ease the pressure on congested urban areas, and so prevent the town rents from rising as much as would otherwise be the case (though suburban rents may rise, but probably not to the same extent as the town rents would have risen).

(*c*) Growth in supply of substitutes. New foods help to reduce the demand for corn, etc., which fall in price, bringing about a fall in rents.

A Rise in Rents may be due to—

(*a*) Growth of population and improved standard of life, which means an increased demand. Prices rise, inferior land is brought into cultivation, and rents rise.

(*b*) Increased pressure in centres of population on dwelling and business sites.

(*c*) Wars and other disturbances, which increase the price and therefore rents.

In practice, the one set of influences tends to counteract the other, but, on the whole, the tendencies to a general rise in rents would seem the stronger.

Section 2. Applications of the Doctrine of Rent

APPLICATION OF RENT TO INTEREST, PROFITS, AND WAGES.

Modern economic analysis has considerably widened the application of the conception of rent. From being a mere explanation of land incomes, the theory of rent is being extended to the whole scheme of distribution.

Rent has been seen to be the payment for the factor of production whose productivity does not depend on the amount of income it receives, but whose income depends upon its superiority in productive powers over that part which receives no income.

An element of economic rent can be found in interest, profits and wages, as is shown in the following illustrations—

(i) **As Applied to Interest.** Suppose there is a sudden "boom" in foreign trade, and a great demand for shipping. Freights rise and large profits are made by the shipping companies. Ships take a long time to build, and a considerable period may elapse before competition from new ships forces the charges down. The extra earnings of the ships during the period of fixed supply are likened to a rent. They are similar to the rent on land, in that owing to a limited supply and consequent high charges, the owners receive a surplus beyond the normal return. Inferior boats may be pressed into service; they become "marginal," and the surplus earnings of the superior boats rise. When further supplies of shipping are available and freights fall, it no longer pays to employ these inferior boats, the margin rises, and the surplus earnings fall.

In a short period, therefore, part of the return from fixed capital may be regarded as a kind of rent.

The term **quasi-rent** is given to the payment for the use of those agents of production, the supply of which, though alterable in a long period, is fixed in a short period.

(ii) **As Applied to Profits.** Similarly with respect to profits. Imagine two firms of similar size and situation, equally equipped and employing the same amount and quality of labour; but one firm is better organized, and can produce the same commodity at a lower cost than the other. If the superior firm can sell all its output at the price which is necessary to cover the costs of the inferior firm, it will do so. The profit it makes over and above that of the inferior firm is in the nature of a rent.

The price of the product tends to equal the marginal costs. The " surplus profits," like rent, do not determine, but are determined, by the price that is charged.

It is the differential profits, of course, which do not enter into the price of the article, not what have been termed the normal profits. The latter must be considered a constituent element in marginal costs, and therefore the supply price. Marginal land is still cultivated, though it pays no rent. But the strictly marginal firm must make a profit ; otherwise it would go out of existence. Dr. Marshall's conception of the *Representative Firm* is useful in this connection. This firm is not exactly marginal in the sense that a slight fall in the price of the product or slight rise in costs would cause it to go out of existence. It is " one which has had a fairly long life, and fair success, which is managed with normal ability, and which has normal access to the economies, external and internal, which belong to that aggregate volume of production." Prices tend to adjust themselves to the cost of production, not of the strictly marginal firm but of the representative firm. A concern which produces more economically than this firm, but can dispose of its products at the price which the latter finds necessary, makes a surplus profit in the nature of a rent.

(iii) **As Applied to Wages.** In the same way as " surpluses " can be found in most interest and profits, they can also be observed in some of the remuneration of labour. A certain parallel has been drawn between the subsistence wage and the margin of production. Less than a bare subsistence income would not evoke a supply of labour.

But most workers receive more than this minimum. One reason may be the superiority in natural ability. The income due to this is equivalent to the rent which

land receives for its natural superiority, and has been termed a *Rent of Ability*. Another reason may be scarcity in the supply of particular classes of workers, brought about either by the heavy cost of training or by artificial and social restrictions. Where capital has been invested in training for the work, a certain proportion of the remuneration corresponds to interest. But the income in such instances is usually quite disproportionate to the income where no capital has been invested. Only a small proportion would be interest; the rest would be a differential advantage due either to superior natural endowment or to the restrictions just indicated.[1]

CONCLUSIONS ON THE APPLICATIONS OF RENT AND ON DISTRIBUTION IN GENERAL.

Rent has been shown to be a payment not peculiar to the natural factor of production. It forms a part of the return to capitalists, entrepreneurs, and wage-earners. These groups of people have their respective margins, and the returns over those amounts are in the nature of a rent. **The main difference between rent for land and the payment for the other factors is that no alteration in rent can affect the supply and productivity of the land; while a change in interest, normal profits, and wages do up to a point affect the supply of capital, enterprise, and labour. To that extent, interest, normal profits, and wages are price-determining; rent is price-determined. But most interest, profits and**

[1] The *Consumer's Surplus* noted in Chapter V, § 2, may be also likened to a rent. In the same way as a producer above the margin *could* sell his product for less than the market price, some consumers would be willing to pay more than the market price rather than go without the article. The one is a producer's surplus, the other a consumer's surplus; they are both determined by the price, and are therefore in the nature of a rent.

wages contain a certain amount of differential gain that does not enter into the cost of the marginal product and is therefore in the nature of a rent.

Though each agent of production tends to be employed in such proportions to each other that their marginal productivities are equal many of the people who supply the various factors receive an income, surplus to the actual marginal worth of these factors. These surpluses may be hidden under the elastic terms wages, interest, and profits, but their existence and influence are nevertheless felt.

The doctrine of rent, therefore, is of service in understanding many problems dealing with income. Final remarks on wages, interest and profit were impossible until rent had been examined and applied. The theory of rent throws a new light on distribution in general, and its implications are far-reaching. Some of these will be examined at a later stage in connection with taxation and social policy.

CHAPTER XI

SOME LABOUR PROBLEMS AND MOVEMENTS

IN this chapter will be considered, briefly of necessity, some of the more prominent problems connected with labour and the movements that have arisen to cope with them. For convenience, these may be examined under the headings of Unemployment, Industrial Unrest, Trade Unionism, and Co-operation. To a certain extent, these are matters of industrial organization, but it was impossible to consider them until the more fundamental problems of value and distribution had been considered.

Section 1. *Unemployment*

UNEMPLOYMENT IN PARTICULAR TRADES.

While particular instances of unemployment may be attributed to certain causes, the problem of general unemployment presents a more difficult question. The subject is bound up with the whole of the economic system, and treatment, if it is to have any measure of success, must be radical in nature.

Unemployment may be confined to a few trades at a time ; it is then largely due to some specific cause that affects those industries particularly. On the other hand, unemployment may be general ; the causes are then more fundamental.

The causes of unemployment in particular trades may be considered first.

(i) **Seasonal Demand.** Some trades are subject to a seasonal demand for their product and therefore make

a seasonal demand for labour (e.g. building, agriculture, etc.). It ought to be possible to mitigate some of the unemployment caused in this way. Where the goods are not perishable, and conditions permit, production might be continuous throughout the year. Credits might be arranged where necessary. Further, certain occupations which do not involve much special training might be " sandwiched " in with each other, so that a man might pass from (say) labouring in the fields in the summer to labouring in gasworks in the winter.

(ii) **Irregular and Short Period Demand.** Some trades fluctuate from day to day (e.g. those depending on the tides). The problem of *casual labour* is one of the most difficult to contend with.

(iii) **Industrial Changes and Re-arrangements.** Introduction of machinery or new modes of production must always cause a certain amount of dislocation. (*See* below.) This form of unemployment would be inevitable under any system ; but proper maintenance during the period, and training for other occupations, would do much to reduce the distress.

MORE FUNDAMENTAL CAUSES OF UNEMPLOYMENT.

The above reasons for unemployment in particular occupations do not go to the root of unemployment in general. It has been contended that unemployment never will cease altogether while the present system continues. But whether this is so or not, general unemployment may be attributed largely to the following—

(i) **Imperfect Co-operation of Producers.** When production was simple and division of labour comparatively unimportant, the amount of unemployment was insignificant. A man working for himself usually had

a certain amount of land and stock, which at least kept him busy for a part of the time and provided the necessaries of life. This was changed, however, when the division of labour became acute. Production now was indirect, and proper co-ordination of the various factors could not always be relied upon. In the absence of any regulating force, it is inevitable for production sometimes to be misdirected, especially where illegitimate speculation has been operating. Moreover, specialization means immobility of labour, and this is an important contributory factor to unemployment.

(ii) **Imperfect Anticipation of Demand.** Production became not only indirect and long drawn out, but came to be undertaken largely in anticipation of demand. Demand cannot always be accurately forecasted, especially where it depends on climatic and other conditions (e.g. the demand for straw hats). A too sanguine estimate may cause too many goods to be produced, with consequent unemployment among the workers directly and indirectly concerned. With the specialization and interdependence of trades, unemployment may result from a very remote and distant cause.

The combined effect of imperfect co-operation of producers and faulty anticipation of demand helps to bring about an industrial depression, which appears to recur at more or less regular periods. The subject of *trade cycles*, with which unemployment is intimately bound up, is necessarily deferred until the credit system has been considered. (*See* Chapter XV, § 3.)

SOME FALLACIES RESPECTING WORK AND WAGES.

(i) **The fallacy that extravagant expenditure creates a demand for labour and keeps wages high.** It is sometimes argued that " money kept in circulation " is good

for trade, inasmuch as it constitutes a demand for goods and therefore for labour.

The fallacy lies in the fact that money " saved " is not hoarded, but entrusted to others who may make more economic use of it than if it were spent on comparative luxuries.

Wealth spent on luxuries has not the same *reproductive* effect as most of the wealth spent on necessaries. A hundred pounds' worth of labour and material put into a machine or good furniture renders a more economic service than the same amount devoted to luxury consumption. The machine, for instance, adds to the social product much more than was consumed in its production, and so swells the national stream of wealth.

(ii) **The fallacy that wars, fires, etc., create a demand for and are therefore to the advantage of labour.** This fallacy is similar to the first. Replacement, though necessary, is not the same thing as more positive and reproductive effort. Similarly, with reference to certain proposals for helping the unemployed, it is better to provide work that is for the common benefit than mere schemes to keep them " employed."

(iii) **The fallacy that the amount of work is limited.** There is a common belief that the amount of work to be done is strictly limited, allowing of no expansion or contraction. Therefore the larger the number of workers, the less return for each, and *vice versa*. The notion of a *work fund* is similar to that of a " wages fund " (Chapter VIII, § 2), and is equally fallacious. At any particular time, of course, the work to be done is limited and a judicious amount of restriction on entrants to the trade could be defended up to a point. (The question of " ca-canny " is different, and as a regular practice is to be deprecated. So, too, on the other

hand, is the practice of some employers who prefer to carry on a regular system of overtime with fewer men than would normally be necessary, even when there is unemployment in the trade.) But over a period, one man's work, *provided it is of a useful nature*, creates work for others ; under-production is more to be feared than over-production.

This fallacy is in some ways similar to that relating to machinery and labour.

MACHINERY AND UNEMPLOYMENT.

A century ago the " Luddites " went about the country smashing machinery, believing that the introduction of machinery was, by throwing people out of employment, the main cause of the prevalent poverty. Even to-day there are people who look upon machinery as a big cause of unemployment. But while the *immediate* effect of a machine's introduction might be to reduce the demand for a particular kind of labour, the *ultimate* effect will under wise guidance be generally beneficial.

How Labour Displaced by Machinery is Absorbed.

(i) As shown in Chapter II, § 2, machinery often brings about a reduction in price. Unless the demand for the commodity is absolutely inelastic, the amount produced will have to be increased, so as to absorb some, if not all, of the workers displaced.

(ii) More employment will be offered in the making of the machinery.

(iii) Further, even if the public do not demand sufficient of the new machine-made goods to retain the original number of men in employment, the cheapening in price will release demands for *other* goods, entailing an increased demand for labour in those directions.

(iv) It might be maintained that when everybody has

all that is required, and no reduction in price induces further purchases, there would be no scope for displaced labour. This is not true, as under such ideal conditions it is safe to assume that people will work shorter hours (i.e. buy more leisure) and so reduce the supply of redundant labour.

To all this should be added the fact that a considerable period often elapses between the invention and actual introduction of a machine, especially where a big capital outlay has been made on the earlier machinery. This "*time lag*" acts as a brake on too speedy displacement.

WARS AND UNEMPLOYMENT.

The reasons for unemployment following a great war are too obvious to need detailed explanation. The more important may be briefly noted—

(i) Few would hold at the present time that wars can be made to pay. Resources are diverted into non-productive channels, wealth is consumed at an enormous rate, and the country tends to live on its capital. To that extent she must emerge the poorer. This means a smaller demand for goods at home.

(ii) The heavy taxation that is imposed in order to pay the interest on war-debt and meet other charges means a drain on the social resources, which reacts on the demand for labour in a similar way. This may be partly offset, however, in so far as the internal (and to a less extent the external) payments of interest create a demand for labour.

(iii) The productive capacity of a nation is reduced through men being killed and incapacitated; and machinery and plant for producing "peace" goods depreciating during the years of war. (It may be contended that the fewer the number of workers, the more

work there will be for each, and that therefore unemployment should be reduced rather than increased. But this ignores the important fact that a *reduction in the amount* of labour may be accompanied by a *bigger reduction in the demand for labour.* "Work creates work." The fallacy is that of the "work fund," which was examined above.)

(iv) Where the late enemy has been an important customer for a country's exports, the same effect upon the demand for home products is observed.

(v) The situation is made considerably worse by an unstable foreign exchange, which hinders trade and therefore the demand for labour.

Section 2. Industrial Unrest

CAUSES OF INDUSTRIAL UNREST.

The Economics Section of the British Association inquired in 1915 into the problem of industrial unrest, and after exhaustive inquiry issued a report,[1] an outline of which, together with subsequent developments, is considered below.

The principal causes of unrest (apart from temporary war reasons) are suggested as being—

(i) The desire of workpeople for a higher standard of living.

(ii) The desire of workpeople to exercise a greater control over their lives, and to have some determining voice as to conditions of work. These include a consideration of the effects of speeding up on the one hand, and of limitation of output on the other.

[1] The Report is considered in more detail in *British Labour, Replacement and Conciliation*, 1914-21 (ed. by Prof. Kirkaldy), being the result of conferences and investigations of Section F of the British Association; Chap. XV.

(iii) The uncertainty of regular employment.

(iv) Monotony in employment.

(v) Suspicion of the workers that they are being exploited.

(vi) The desire of employers for more plentiful and regular output.

To these may be added—

(vii) The desire for recognition of Trade Union functions. On this last point, opinion is very varied. The workers' organizations have received an increasing amount of recognition in recent years; Conciliation Boards, Industrial Councils, etc., would be practically impossible without it. Trade Union machinery is not merely recognized by the State, but is employed in connection with the Health and Unemployment Insurance, and other schemes. But the question of Trade Union rights in such matters as shop management, etc., still gives rise to serious dispute.

ATTEMPTS AT DIMINISHING INDUSTRIAL UNREST.

It is only possible here to give very brief notes on the principal methods adopted.

(i) **Conciliation and Arbitration Boards.** These may be permanent or temporary in nature, consisting of representatives of employers and employed, and possibly of outside members in addition. Disputes are referred to the Boards and, in the event of no agreement being reached, there may be arrangements for appointing one or more arbitrators to give their award. But the parties are not bound to accept this decision, a feature of the system being the *voluntary* principle; this gives agreements, when made, a more acceptable and surer basis.

(ii) **Arbitration.**

(*a*) *Voluntary.* The Conciliation Act of 1896 gave

the Government the power to intervene in a dispute, to bring the parties together and, if invited, to appoint arbitrators. But a decision given by an arbitrator can never be as satisfactory as one arrived at by mutual discussion, concession, and final agreement. It is difficult to find an arbitrator who is perfectly impartial. Whether he is chosen by the parties concerned or appointed by the State there is always the suspicion that his award may be influenced by some bias, conscious or unconscious.

(*b*) *Compulsory.* This mode of settling a dispute has never been popular in this country, though it has been practised in New Zealand, New South Wales, and elsewhere. The Munitions of War Acts, 1915–17, introduced compulsory arbitration as an emergency measure, but ceased to operate in 1919.

Arbitration, in any case, cannot be satisfactory where the issue is wider than one of wages or hours. The problem of Trade Union recognition, for example, is too fundamental to permit of an outside decision being imposed upon the parties in dispute.

(iii) **The Industrial Council.** In 1911 a Council was established, composed of twenty-six members (equally representative of employers and labour) and a chairman. It was to consider and inquire into trade disputes, and be regarded as supplementary to the machinery of the Conciliation Act of 1896. Provision was made for investigation, conciliation, or arbitration, as the occasion required. The Industrial Council could only make recommendations; it had no compulsory powers. The Council did not have a marked measure of success and has been superseded by subsequent schemes.

(iv) **Whitley Councils.** The Government Committee, which was appointed in 1916, recommended "the establishment for each industry of an organization

representative of employers and workpeople to have as its object the regular consideration of matters affecting the progress and well-being of the trade from the point of view of all those engaged in it, so far as it is consistent with the general interest of the community."

For each industry there were to be permanent national, district, and local councils, all meeting regularly; these to be concerned not merely with wages and hours, etc., but also with the broader problems of education, welfare, scientific management, etc. Again the basis was voluntary.

The Whitley Councils have been set up in over sixty industries and in the Civil Service, affecting more than three million workers. From the few years' experience of them, it would appear that they are capable of useful work in some directions, but cannot be regarded as fulfilling all the expectations that were optimistically held a few years ago. In the well-organized trades, their work is rendered partly unnecessary by the existing machinery. At the same time, they may give a certain amount of useful organizing experience to the workers' representatives on the Councils.

(v) **The Industrial Courts Act, 1919.** A standing Industrial Court was appointed by the Ministry of Labour, consisting of representatives, employers, and workers, together with a number of "independent" persons. Trade disputes may be referred to this Court, which makes full inquiry, and may take evidence. But the voluntary principle is still adhered to; there is no penalty for failure to comply with the decision of the Industrial Court.

(vi) In rather a different category from the above are *Profit-sharing* and *Co-partnership* schemes, which are examined below.

To quote Prof. Pigou, it may be concluded generally "that eminent outsiders, non-governmental boards, and official agencies of mediation are all valuable in their spheres. It must not, however, be forgotten that they are also dangerous. As an indirect consequence of their presence, the development of peace-promoting machinery within separate industries—a more effective solvent of differences than 'good offices' are ever likely to be—may be checked. To prevent this result, discretion on the part of the intervening body is essential. It should never arrogate to itself the claim to more than a transitory usefulness, and should carefully encourage . . . the formation of mutual Boards in the industries in which it is brought into contact."[1]

PROFIT-SHARING AND CO-PARTNERSHIP.

Profit-sharing is based on an agreement between an employer and the workpeople under which the latter receive, in addition to the wage, a share *fixed in advance*, in the profits of the undertaking. It thus excludes premium bonus arrangements, gratuities, etc.

Co-partnership is an extension of profit-sharing schemes. As a rule, the worker is enabled to accumulate his portion of the profit and exchange this for shares in the employing company, though there are some systems which allow the workers to obtain shares without any preliminary distribution of a profit-sharing bonus. In a few instances, provision is made for representation of the workers on the board of directors, but the proportion so far has only been nominal.

Though individual profit-sharing and co-partnership schemes have had a certain amount of success, the same cannot be said of the majority of such arrangements. The Government Report in 1920 (Cmd. 544) stated that

[1] *Economics of Welfare*, p. 390.

out of about 400 schemes put into operation at various times, over half had come to an end. Only fourteen operating in 1920 had survived over thirty years, thirty-six over twenty years. While many of the schemes had failed for financial reasons, over a half had been abandoned owing to dissatisfaction of both employers and employed. Trade Union opposition has generally been very pronounced, it being claimed that participation in the profits of a concern, even if it does not tend to reduce the wage bill and so nullify any financial advantage, may undermine the loyalty of the workers to their own organization, and in the end be against their true interests.

Section 3. *Trade Unionism*

THE TRADE UNION MOVEMENT.

A Trade Union has been defined as " a continuous association of wage-earners for the purpose of maintaining the conditions of employment " (Webb). The element of continuity is important, as early labour organizations were usually called into existence only in times of dispute, and dissolved when they were no longer of urgent need. But it was soon found indispensable for the combination to be continuous, not merely for reasons of preparedness, but also for the fact that the very *existence* of a union might in some cases prevent undue demands on the part of the employers.

Early Trade Unions were confined to male skilled workers, but in the " New Unionism " movement towards the end of last century, women and unskilled workers were brought within the scope. This was largely due to the recognition that the skilled " aristocracy of labour " were really acting against their own interests in keeping out the so-called semi-skilled and

unskilled. It was found that the new machinery, tended by workers who could not be classified as "skilled," was often able to compete successfully with the skilled craftsman, and helped to blur the difference between the grades of labour. It was necessary, therefore, for the "lower" classes of labour to be organized, if only to prevent their "blacklegging" the "higher" grades.

In some ways related to the "New Unionism" has been the development of "Industrial" as distinct from "Craft" unionism. The early organizations of the skilled workers were mainly on "craft" lines, i.e. associations of men engaged in performing similar operations, irrespective of the industrial group to which they belonged. Thus engineers in the railway, motor, iron, and steel industries, etc., might all belong to a single union or group of unions. Comparable in some ways to the organization of capital, craft unionism is a form of "horizontal" combination. (*Cf.* Chapter IV, § 2.)

To a large extent there has been a reaction against this type of combination in the movement for "Industrial" unionism, which, by attempting to organize all the workers in an industrial group (e.g. railways, mines, etc.), aims rather at a "vertical" combination. It is maintained that this type of union is more effective for serving the best interests of the workers generally. Further, those, like the Guild Socialists, who advocate Trade Union management of industry, support industrial unionism on the ground that a unified organization is a necessary preliminary to industrial control. It is superfluous to add that those who follow a more Syndicalist line of thought, and aim not merely at trade union management but at ownership of the industrial groups, are unanimously in favour of industrial unionism.

Though the controversy cannot be considered finally

settled, amalgamation and federation are constantly going on. Nearly every Trade Union in the country is attached to one federation or another, established to secure unity of purpose and action in the various industrial groups. In the following Trades Union Congress statistics is shown the remarkable growth of Trade Union membership since 1868 (the first year in which the Congress was held), particularly during the war period. It will be observed that while the membership increased by nearly 4,000,000 between 1915 and 1921, the number of unions fell from 215 to 212, though there had been a rise in the meantime: sure evidence of the large amount of amalgamation in those years.

It should be added that besides the 6½ million members affiliated at the present time to the Trades Union Congress, there are about two million Trade Unionists not affiliated. The total number in the country in 1920 is given as 8,502,000 compared with less than 2,000,000 in 1901.

TRADES UNION CONGRESS STATISTICS

Year.	Number of Delegates.	Number of Societies Represented.	Number of Members Affiliated.
1868 .	28	28	118,367
1878 .	136	114	623,957
1888 .	165	138	816,944
1898 .	406	188	1,184,241
1908 .	522	214	1,777,000
1915 .	610	215	2,682,357
1919 .	851	266	5,283,676
1920 .	955	215	6,505,482
1921 . [1]	823	212	6,416,510

[1] Since the above was printed, the 54th Congress has met (September, 1922). Owing largely to unemployment, the membership has fallen to 5,127,308, a drop of a million and a quarter, the number of delegates being reduced by 93.

Six out of the eighteen groups of unions affiliated to the Trades Union Congress have a membership equal to two-thirds of the total—

General Workers	1,117,680
Mining and Quarrying	937,412
Engineering and Foundry Trades	695,013
Railway Unions	616,196
Other Transport	470,595
Building and Woodworking	455,717
Total	4,292,613

As mentioned, a large proportion of Trade Unionism is also covered by federation activity; this is shown by the following figures—

Federation.	No. of Unions Affiliated	Total Membership Represented.
Nat. Fed. of General Workers	8	1,750,000
Building Trades Federation	16	500,000
Shipbuilding and Engineering Trades Federation	34	1,503,984
[1]Transport Workers' Federation	21	1,348,754
Totals	79	5,102,738

[1] In process of formation.

TRADE UNION METHODS.

Trade Unions vary in constitution and methods, according to the nature of the occupation and of the workers. The proportion of attention given by the different unions to the various methods mentioned below fluctuates considerably. One union may favour political action, while another ignores it. Or one may be more subject to industrial disputes than another, and therefore devote a bigger share of its activities and

funds to dispute benefits. So far as is possible to generalize, however, the following are the principal methods—

(i) **The Method of Voluntary Insurance.** From the funds raised by common subscription, benefits are provided—

(*a*) Friendly benefits, such as funeral, sick, and superannuation pay.

(*b*) Trade benefits, such as unemployment pay.

(*c*) Dispute benefits. These are provided now by nearly all the unions, and in some cases absorb the greater part of the revenue.

The provision of friendly benefits has been seriously criticized by the advanced Trade Unionists, who contend that this is not the function of a union, which, in so far as it is a friendly society, tends to become conservative and over-cautious. On the other hand, the friendly benefits do attract a certain number of workers who otherwise might not become members. The part now taken by the Trade Unions in carrying out the Insurance Act has helped, if anything, to strengthen the provident element. In any case, it is doubtful whether this obscures the real functions of Trade Unionism.

(ii) **The Method of Political Action.** The importance attributed to this varies from union to union. In the history of labour organization, there have been periods when political action has been prominent, other periods when it has been generally alleged to be futile. But the fact that the political activities of Trade Unions have been opposed from outside quarters shows that this method is full of potentialities, and one to be consistently followed.

(iii) **The Method of Collective Bargaining.** This is the method adopted to determine standard rates, working hours, and conditions of employment, and is held by

many to be the most important function of trade unionism. In addition to the ordinary function of collective bargaining, the principle has been extended by the establishment of permanent Conciliation Boards, equally representative of employers and employed, to consider matters in dispute. In some trades these Boards have been very successful, and have brought about concessions to the workers with less resort to the strike weapon than in industries where the collective bargaining machinery is not so advanced.

(iv) **The Method of the Strike.** This is the last resort of the Trade Union, which holds fast to the principle of the right to strike. Though several schemes have been devised, and some put into operation, for the securing of industrial peace, the principle of the ultimate right to strike has not in this country (except in war-time) been seriously challenged. Attempts to impose schemes of compulsory arbitration have failed. (*See* § 2.)

TRADE UNION RESTRICTIONS.

Trade Unions aim, in effect, at monopoly of labour supply. This does not mean that they are to be criticized on that ground. A firm, employing a thousand men, is equal in bargaining power to all the employees put together, and is virtually a combination in itself. The workers in such a case have to obtain a monopoly to secure equal bargaining power. The monopoly here is not of any special class of labour in a trade, but is rather a general combination intended to reduce the employer's advantage.

Of a different type is the monopoly aimed at by a particular class of labour, which by *apprenticeship* or other restrictions attempts to limit entry to the trade. Though apprenticeship restrictions are still prevalent

in many industries, they do not offer the same barrier as formerly. The introduction of machinery and the subdivision of processes rendered unnecessary, in several instances, the long periods of training, and many unions have been obliged from necessity to accept as members those who did not pass through a formal apprenticeship period.

Again, there is the monopoly of certain kinds of work held to be the special function of a particular class of labour. This leads to demarcation disputes among the workers themselves. The motive is the desire for a proper control over the conditions of employment rather than mere selfishness. Nevertheless demarcation disputes are, on the whole, less warrantable than those which concern the interests of all the workers; classes within classes do not make for unity.

Section 4. *Co-operation*

THE CO-OPERATIVE MOVEMENT.

Though the Co-operative Movement in this country is usually associated with societies of consumers, it is necessary to point out the other form of co-operation, namely, that of people in the capacity of producers.

In the earliest days of the movement, co-operation was chiefly of producers. Workers, uniting their services and interests, jointly produced and sold commodities, the profits from which were distributed in agreed proportions amongst the members of the society. There have been several attempts to develop these producers' associations, and, although a number are still found in certain industries,[1] they are overshadowed

[1] Mainly in the textile, boot and shoe, and printing trades. There is also a certain amount of co-operative production and selling among farmers, but this could hardly be termed *workers'* productive co-operation.

by the consumers' associations. (On the Continent, however, co-operation of producers has been comparatively more successful.)

Development of Consumers' Co-operation.

The movement began with the decision of a number of people to buy and sell collectively the articles they and their friends needed. They would get them at the wholesale price, and the profit, instead of going to the ordinary shopkeeper, would be retained by the members of the society. Independent retail stores were gradually established in various parts of the country.

In time the movement went a stage further. It had begun with the selling end, and now it began to develop *backwards*. Wholesale dealings were engaged upon, and the retail stores were to be supplied as far as possible from co-operative sources. The wholesale co-operative societies commenced to manufacture on their own, and gradually extended their scope. Their activities now range from tea-growing to banking. But they cannot be termed associations of producers in the strict sense of the word. The control is almost entirely from "above," and the employees are paid on a wage basis.

Broadly speaking, the wholesale societies are in that relation to the retail societies as the latter are to the individual members. The profits of the wholesale dealings are distributed among the retail organizations, which in turn distribute the profits among their customers.

The consumers' movement in Great Britain is now very extensive, its membership amounting to over 4½ millions. Since one member sometimes represents a whole family, the number of persons actually affected is considerably higher. Three-sevenths of the population are supplied with about one-half of their foodstuffs and one-tenth of their other household requirements.

CO-OPERATIVE STATISTICS, 1920[1]

	Consumers.		Producers.
	Wholesale.	Retail.	
Number of Societies .	3	1,379	105
Number of Members .	2,119	4,504,852	42,855
Share and Loan Capital	£24,605,694	£86,553,168	£2,788,573
Sales	£136,670,058	£254,158,144	£9,222,699
Net Surplus . . .	£909,669	£25,458,555	£539,733
Number of Employees	47,470	138,955	11,873
Salaries and Wages .	£7,533,874	£19,978,118	£1,673,461

[1] Adapted from Co-operative Union Statistics; *People's Year Book* for 1922.

ADVANTAGES AND DRAWBACKS OF CO-OPERATIVE SOCIETIES.

Some of these are common to all large-scale enterprise; others are peculiar to the co-operative movement.

(i) **Advantages.**

(*a*) *Regular and Guaranteed Market.* The customers can generally be depended upon for a regular order; this permits calculation to be made, and reduces the quantity of unsold stock.

(*b*) *Saving on Advertisement.* Partly for the same reasons, it is unnecessary for co-operative stores to advertise to the same extent as other firms. Nevertheless, a certain amount of wise advertisement is essential.

(*c*) Dissemination of knowledge of best methods among the different co-operative concerns.

(*d*) The economies of large-scale production, selling, and administration. (*See* Chapter IV, § 1.)

(ii) **Drawbacks.**

(*a*) The difficulty sometimes of finding efficient

business organizers among the ranks of the co-operators.

(*b*) The overlapping of areas of different societies, and consequent friction.

These defects are not fundamental, and are likely to be remedied as the movement grows in scope and experience.

ECONOMIC ASPECTS OF CO-OPERATION.

Some of the more important economic aspects of the co-operative societies may be briefly indicated.

(i) **Selling at Market Price.** The societies do not abolish profits, but rather appropriate them for the benefit of the co-operators. It has been frequently suggested that the stores should not sell at the ordinary market price, but at such a figure as would just cover costs (allowing, of course, for a certain reserve to meet contingencies).

The policy of selling at the market price has, however, prevailed. It is claimed—

(*a*) That the members prefer a periodical dividend which is of more impressive dimensions than the small economies, amounting perhaps to only a few coppers, effected at the time of the purchase.

(*b*) That the dividend serves as a hold on the purchasers and induces them to become regular co-operators.

(*c*) That friction with other dealers is avoided.

(*d*) That expenditure on education and general improvement is made more possible.

(ii) **Fixed Interest.** Different from joint-stock companies, the shareholders in co-operative societies (the customers who have allowed their dividends to accumulate) receive a fixed rate of interest, i.e. the profits are distributed among co-operators as customers rather

than as capital holders. Further, in business meetings, the rule is one vote per member, not per share.

(iii) **Sales to Non-members.** While such sales are not permitted in some Continental co-operative societies (e.g. in Germany), they are allowed in the United Kingdom; but the number of customers who are non-members is not very large. Non-members usually receive half of the dividend, which serves as an inducement to qualify as members in order to get the full benefit.

(iv) **Administrative and Managerial Experience.** The co-operative societies have been instrumental in giving the working classes a large practical experience of business organization. It used to be stated that co-operative enterprise was subject to certain limits, but recent expansion in both methods and function have provided ever-widening scope for the worker co-operator. Some claim that this large measure of self-government is an important stage in the development of democratic control of industry.

THE TENDENCY TO CONCENTRATION IN LABOUR ORGANIZATIONS.

It was observed in an earlier chapter that the control (though not necessarily the ownership) of capital was becoming concentrated in fewer hands. The same tendency is observed in the organization of labour. The Trade Union membership has increased, while the number of unions has decreased. Through the Trades Union Congress and the new General Council, the forces of labour are being further co-ordinated.

Similarly in the co-operative movement, the wholesale societies link up the numerous retail societies, presenting what is sometimes called the Co-operative Commonwealth.

The relations between the Trade Union and Co-operative movements are gradually becoming strengthened. This is evidenced by the help given by the stores during strikes and by Trade Union investments in the Co-operative Bank. The political activities of the two movements are also, to a large extent, providing a common ground.

It is contended in some quarters, however, that a real unity between them cannot be found. The critics of the wage system point to the " dividend hunting " of the co-operative societies, maintaining that profits are incompatible with true labour interests. Others argue, further, that the co-operative activities are not so directly concerned with a man's immediate interests and standard of living as those of the Trade Union; that the union is consequently more militant than the co-operative society, and the two can never enter into a perfect alliance.

But the fact that the Trade Union affects man primarily as a producer, and the co-operative society concerns him as a consumer, does not indicate any clear-cut distinction between them. The two are certain to develop in their own particular ways, but sooner or later their mutual interests must be generally recognized.

PART IV

THE MECHANISM OF EXCHANGE

CHAPTER XII

THE FUNCTIONS OF MONEY

Section 1. *The Nature and Functions of Money*

MONEY EMERGED FROM THE INCONVENIENCE OF BARTER.

AN indirect but simple way of understanding the services rendered by money in trade is to examine the earlier system of barter, under which goods were exchanged directly for other goods. *Barter presented the following difficulties—*

(i) **Want of Coincidence.** Barter requires a double coincidence of things required and offered. If A and B are going to trade their goods, A must have what B wants (and in the right amount), while B must have what A wants (also in the right amount). Further, they must both require each other's goods at the same time. If A wants bread and offers cloth, B wants cloth but can only offer boots, then a third person C *may* be found who wants boots and offers bread, and so complete the triangle of exchange.

But it is obvious that as division of labour develops, and wants grow in number and variety, this way of arranging one's supplies and needs becomes more difficult. It was only possible, and then in a rough way, among very small communities.

Modern exchange, though outwardly complex in its mechanism, is really very much simpler in its nature than barter. The need for a double coincidence is eliminated. The principle is *sale and purchase*, whereby a man sells his commodity to another in return for a recognized medium, with which he can purchase from a third person, or a number of persons, at various times if need be, the goods that he requires for his own consumption. The recognized medium we call *money*.

(ii) **Want of Measure of Value.** Another drawback of barter is that, while A may offer what B wants, and B may offer what A wants, there is no satisfactory means of evaluating the respective commodities. A may have a big quantity of his stock, B only a small amount of his. Obviously the stocks as such will not be exchanged. What, then, is to be the measure of value ?

Here, again, the need for a monetary medium is evidenced. Money measures the values of goods, which may, if necessary, be directly exchanged without the actual passing of money. Barter, therefore, is of two kinds, the second more developed than the first.

(*a*) Where goods are exchanged for goods, without any system of mutual evaluation.

(*b*) Where some third commodity (i.e. money) is used to measure the values, before the direct exchange can take place.

(iii) **Want of Means of Subdivision.** Some things are easier to split up into parts than others. Further, certain things lose in value when subdivided.

Suppose a man to have his wealth concentrated in cows or precious stones, neither of which can be subdivided without loss. If he wished to purchase anything of small value by direct exchange, he would find

it almost impossible, unless he lost by the exchange. By the use of money, however, the difficulty is solved. The cow or precious stone is sold for a sum of money, which can be subdivided into a number of tokens of small denomination. The expenditure of these can, if necessary, be spread over a time, demonstrating another advantage over barter.

NATURE OF MONEY.

Money is a commodity chosen by common consent to serve as a means of exchange, and of full discharge of obligations. It has been defined as "that which passes freely from hand to hand in full payment for goods, in final discharge of indebtedness, being accepted equally without reference to the character or credit of the person tendering it, and without the intention on the part of the person receiving it, himself to consume or enjoy or otherwise use it than by passing it on sooner or later in exchange" (Walker). This definition applies to money in the ordinary sense; but the importance of credit instruments, serving as money substitutes, must not be overlooked.

The fact that money is a commodity is important. It may take, and has taken, several forms. (The reasons for the eventual choice of precious metals will be considered below.) Though a metallic coin is often regarded as different from other commodities, it is not so in its real nature. A sovereign buys a pair of boots; this only means that the value attached to the gold in the sovereign is the same as that attached to the pair of boots; it would be just as true to say that a pair of boots buys the sovereign. The value of gold is governed in the same way as that of boots or anything else, and in the long run approximates to its cost of production.

When payments were made in kind, either for goods or for services rendered, a man might receive something which in nature, quality, and quantity did not appeal to his liking. One great advantage of the introduction of money is that he is enabled to use his wealth in whichever way he pleases.

THE FUNCTIONS OF MONEY.

These were indicated indirectly in considering the drawbacks of barter. They may be stated as follows—

(i) **Means of Payment.** Direct barter of goods for goods to any appreciable extent is impossible in modern communities. Goods are therefore exchanged for an intermediate selected commodity, which, in turn, is exchanged for other goods, probably in another place, at a different time, and in smaller or greater amount. This commodity, or money, thus fulfils the function of a *medium of exchange.* Since money is used in such " one-sided " transactions as tax-payments, etc., where there is no exchange in the ordinary sense of the word, the broader definition of the function as a means of payment is perhaps preferable.

(ii) **Measure of Value.** Money serves as a basis for the comparison of values in exchange ; it is, as it were, the common denominator of value. Even in barter, as has been noted, money may be used indirectly, if the goods to be exchanged are mutually evaluated in terms of money.

(iii) **Store of Value.** A man who wishes to conserve his wealth in some convenient form, always realizable as occasion requires, finds the money medium most suitable for his purpose.

(iv) **Standard for Deferred Payments.** When payment is to be made at a future period, the parties to the transaction require a medium, which will have, as far

as possible, the same exchange power in the future as at present. The Russian and German paper currencies are so unstable at the present time as to render this function almost impossible.

"Money is a form in which capital is held *in suspense* without loss. . . . Money is not second-hand; it will always fetch itself, and it loses nothing by keeping. . . . Cattle are good enough for present bargains, but not for the forward- and backward-looking calculations of profit and loss." (Bagehot).

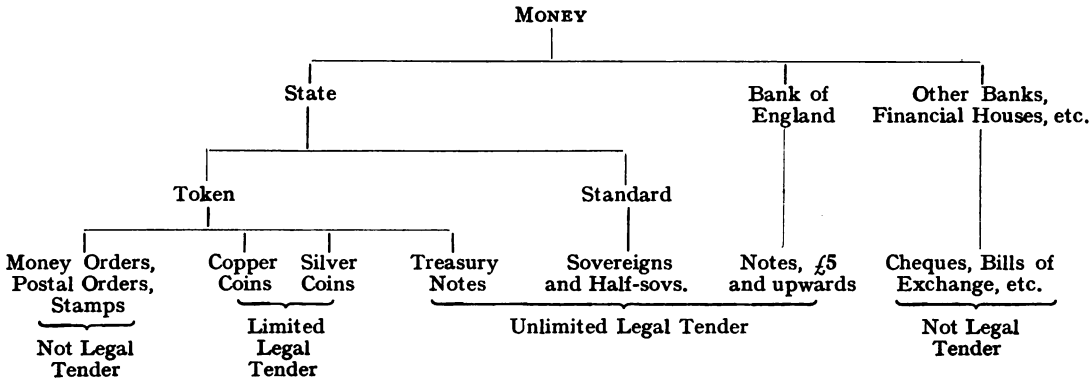
Under this heading may be included the function of money as the *basis for credit transactions*. Though credit documents have practically displaced actual coin in large transactions, the money material still remains the basis of credit arrangements.

FORMS OF MONEY.

It should be clear by now that anything which fulfils the functions detailed above may be considered in effect as money. Cheques, bills of exchange, bank notes, Treasury notes, etc., are forms of money, since they perform the same functions as (and often more effectively than) minted coins.

A distinction is sometimes drawn between money and *currency*, the latter indicating the particular kind of money which passes current in a country, and whose form and issue are strictly regulated. Currency is said to be *legal tender* when a creditor is obliged to accept payment of the debt in that form of money, if offered. Sovereigns, shillings, pence, Bank of England notes and Treasury notes would be considered currency; but cheques and bills of exchange, though effectively serving as money, would be excluded.

The principal forms of money passing in this country may be tabulated as shown on page 172.


MONEY
State
Bank of England
Other Banks, Financial Houses, etc.
Token
Standard
Money Orders, Postal Orders, Stamps
Copper Coins
Silver Coins
Treasury Notes
Sovereigns and Half-sovs.
Notes, £5 and upwards
Cheques, Bills of Exchange, etc.
Not Legal Tender
Limited Legal Tender
Unlimited Legal Tender
Not Legal Tender

Section 2. Coinage and the Gold Standard

QUALITIES OF GOOD MONEY MATERIAL.

Many things have served as money at different stages of our history. Slaves, cattle, skins, furs, shells, etc., were employed before the metals gradually supplanted them. The ideal material for use as money has yet to be discovered. Paper money and credit documents are only representative of money. Gold, so far, fulfils the necessary requisites better than any other commodity.

These attributes are—

(i) *Utility.* It must have a utility independent of the power to serve as money, in order that it will be *generally acceptable.* Cattle, skins, gold, etc., are desirable for the satisfaction they offer in themselves.

(ii) *Portability and Compactness.* This includes *transportability* without depreciation. Since money has to be moved about, it is desirable to concentrate the value into a convenient form. Iron would not be as satisfactory in this respect as the precious metals, which are more satisfactory as a store of value. Low expenses when money has to be transported are also an important consideration. (It would be possible to have the value *too* concentrated, causing inconvenience if used as money, e.g. precious stones.)

(iii) *Stability of Value.* The material selected still remains a commodity whose value is influenced by changes in supply and demand. Since the value of the monetary material measures the value of all other things, any alteration automatically affects the values of everything else. Unstable prices are bad for everybody. Consequently it is essential that the material chosen should be as stable in its value as possible.

(iv) *Durability.* The money material should not deteriorate with keep and wear. Also it should not

require special attention. Cattle, corn, etc., were found unsuitable in this respect. Even among the metals, there are some kinds less destructible than others. A metal that "rusts" on ordinary exposure is not satisfactory.

(v) *Cognizability*. The material should be easily recognizable. A metallic medium should have a distinctive colouring. Nickel and silver coins circulating together would cause confusion. Gold is the most recognizable of the precious metals.

(vi) *Homogeneity*. The material should be of the same quality throughout and capable of standardization. Metals are obviously the best for this purpose.

(vii) *Divisibility*. The material should be capable of being divided without losing value. Again, metals show to advantage; after division, they can be re-united. Precious stones, on the other hand, lose heavily in value when broken up.

(viii) *Malleability*. A material which permits of moulding and stamping is essential.

ADVANTAGES OF GOLD IN RESPECT OF THESE ATTRIBUTES.

It is clear that metals, in the matter of divisibility, homogeneity, durability, and malleability, are much superior to such early forms of money as cattle, skins, or slaves.

Among the metals, gold stands out as best fitted for use as money. It has many alternative uses, and, when necessity arises, can be "reclaimed" from ornamental use and converted into bullion or coin. (This was done in Germany during the war.) It is very compact, cognizable, does not tarnish, and can be stored without loss.

Gold is by no means perfect in its stability of value,

but it is probably superior to any other single medium that has yet been used. An advantage of gold in this respect is that the world's stock is very large, in comparison with the annual output.[1] In normal times, the demand for gold proceeds at about the same pace as the supply, and serious discrepancies are rare. When times become abnormal as in war, the demand for gold outpaces the supply, its price rises, and dislocation of the general level results.

In respect of portability, while gold has the highest specific value of all the coin-metals except platinum, it is too heavy and inconvenient for the huge transactions that now occur daily. Further, the transport of gold involves a certain cost. A system of accounting has developed, and paper money and other credit documents tend increasingly to take the place of gold—or rather, since the commodity value of gold is always in the background, to represent gold—in modern transactions of any amount. *Gold has therefore become the basis of calculation rather than the material medium of exchange.*

THE BRITISH COINAGE SYSTEM.

The earliest coins were valued according to their weight and fineness, the pound being originally equivalent to 1 lb. of silver. Much time used to be wasted in testing the quality and weight of coins, for there was no single system in force, and "bad" money was all

[1] The annual world production of gold is about a hundred million pounds sterling. (Of this, over a half goes into coinage.) The total value of the world's coin and bullion is reckoned at over two thousand millions. The annual addition to the stock, therefore, is about 5 per cent. Thus, even if the world's annual output were doubled or trebled, the effect on its exchange-value, though appreciable, would not be as great as if the gold were literally used up as quickly as it was produced.

too plentiful. Things were not improved by the variety of foreign moneys that also passed as currency.

In time, the State recognized its responsibility and, monopolizing the rights of coinage, regularized the whole monetary system. Ultimately, the gold sovereign was made the *standard coin*, its metallic and face values being identical. It was to weigh 123·27447 grains of standard gold, $\frac{11}{12}$ths or 22 carats fine, and to be legal tender so long as its weight did not fall below 122·5 grains. Half-sovereigns were to weigh exactly half, but the minimum for legal tender was to be 61·125 grains.

Gold coinage is "*free*" in the sense that bullion is acceptable for coinage up to any amount; "*gratuitous*" in that no charge is made for the conversion.[1]

The Mint accepts gold for coinage at £3 17s. 10½d. per ounce, but in practice a person takes it to the Bank of England, which is legally compelled to give cash for all gold at £3 17s. 9d. per ounce. (The difference of 1½d. is not a charge for coining, but rather of the nature of a discount. A little time must elapse between paying out coin, i.e. the "present worth" of the bullion and converting the gold into coin; this means a loss of so much interest.)

Token Coins of silver and bronze are so called because their metal value is less than their face value, their real service being to substitute for gold in small transactions. While gold is legal tender up to any amount, silver is only legal tender up to £2, copper up to 1s.

According to the Coinage Act, 5s. 6d. was to be coined from an ounce of silver, $\frac{37}{40}$ths fine. As the price of silver was in ordinary times much below 3s. per

[1] Where a charge is made by a state to cover the cost of minting, it is called "Mintage" or "Brassage."
"Seignorage" is a toll exacted by a state over and above the brassage.

ounce, the Mint made an appreciable profit on silver coins, even after paying the costs of minting and renewals.

By 1918 the price of silver had risen to over 5s. 6d. per ounce. This meant that the face value of silver coins was now below their bullion value. As expected, the coins began to go out of circulation. To restore the position, the State in 1920 introduced a silver-nickel currency, which was cheaper to produce. Since then, silver has fallen again in price; but as the silver currency is in any case only a token coinage, there seems no reason why the older form should be restored.

MINT PRICE AND MARKET PRICE OF GOLD.

The Mint price of gold should be distinguished from its Market price. In normal times there is never any serious difference between the two, but during and since the war the market price of gold has risen very much above £3 17s. 10½d. per ounce.[1] This is largely due to the departure from the gold standard. More will be said later about this subject, but it may be stated here that *one effective way of bringing about a parity between the Mint and Market prices would be to make the note issues freely convertible on demand into gold.* Under conditions of perfect convertibility, the available stock of gold should be big enough to prevent

[1] With reference to the controversy during the war over the arrangement between the Bank of England and the South African gold producer to take over all his output, the following extract from the Report of the Gold Production Committee, 29th November, 1918, is informative—

"Had not the Bank of England been willing to take his products, he [the gold producer] would have been unable to market them at all during the war, or at most only to a very limited extent. . . . He accepted readily an arrangement under which the Bank of England agreed to take the whole of his products."

the price from rising. Any movement towards a rise would cause instant conversion of notes into gold, the increased supply of which would automatically check the tendency. Inconvertibility of notes, however, brings about a shortage in supply of gold, with a consequent rise in price.

It has been suggested by some writers that there is little likelihood of gold returning to its pre-war value, and that the State should therefore reconstruct the standard coinage, and issue sovereigns containing less fine gold than at present. These coins would not be so liable to be driven out of circulation as those which have a higher specie value. But the idea of tampering with the coinage is never popular, and the above proposal has not met with much support.

GRESHAM'S LAW.[1]

Gresham's Law states that *where "good" and "bad" money are circulating together as legal tender, the "bad" money tends to drive out the "good."*

When the law was first formulated, it had direct reference to debased coinage; but it applies with equal truth to depreciated coinage not necessarily debased, and also to depreciated paper currencies.[2]

[1] This law is incorrectly attributed to Sir Thomas Gresham, who was the founder of the Royal Exchange and financial counsellor to Queen Elizabeth. It had been propounded by earlier thinkers, notably Nicholas Oresme, minister to the French King, Charles V, in the fourteenth century. (*See* Appendix.)

[2] By *debasement* is meant the interference with the weight or quality of the metal in a coin. *Depreciation* refers to the diminished purchasing value of money, and may be the result of debasement of coinage or inconvertibility of notes, or to changes in the supply of money generally. *Appreciation*, on the contrary, denotes an increase in the purchasing value of money.

(i) *When good and bad coins of the same metal circulate together as legal tender,* the full-weight coins tend to be kept back from circulation, and may be hoarded or melted down. Further, since the laws of legal tender do not apply outside the home country, foreigners will only accept coins at their bullion value. Thus the export of the good coins is another way in which they are driven out by the bad.

(ii) *When coins of two different metals circulate in a bimetallic system (see below), and the market ratio is different from the Mint ratio,* since both kinds of coins are legal tender up to any amount, the tendency will be for the coins with a smaller market value as bullion to drive out of circulation those coins with a higher value as bullion.

(iii) *When an inconvertible paper currency is circulating together with full-value coinage,* and they are both unlimited legal tender, the tendency is the same.

In the long run, however, the inferior currency might bring about such unwelcome results that "good" money has to be re-introduced to drive out the "bad." *Hence, over a long period, Gresham's Law does not necessarily operate.*

DEVELOPMENT OF THE GOLD STANDARD.

Gold has not always been the single standard metal in the British coinage. It began to be coined regularly in 1344, but before then silver had been the standard basis. From that date, until 1816, silver and gold were more or less in circulation together, and variations in their proportionate values to each other were a constant source of anxiety to the Mint officials.

Following the recoinage of silver in 1696, when full-weight coins were issued in place of the light and base coins, the gold coinage became over-rated (i.e. its bullion

value was less than its face value), and, in accordance with Gresham's Law, tended to drive the silver coinage out of circulation. In 1717, the value of the guinea as measured in silver was reduced from 21s. 6d. to 21s., and gold and silver coins were supposed to circulate together at a fixed ratio. But the silver currency was still under-rated and again tended to disappear.

In 1816, the whole system was reorganized, and gold was made the single standard. The sovereign took the place of the guinea, and silver coins were reduced to the rank of tokens. The single standard has been retained ever since, despite the criticism of the "bimetallists."

The Departure from the Gold Standard.

The subject of the gold standard will be returned to in considering the questions of money's purchasing value and the foreign exchanges. For the present, it is sufficient to say that during and since the war, most countries found it necessary to depart from the gold standard. This may have been inevitable in war-time, but many experts are now strongly advocating a return to pre-war conditions. Though the gold standard is by no means ideal, it is better than one which is so vague as to be practically non-existent. The present basis of exchange, especially in international trade, can hardly be considered satisfactory.

[BIMETALLISM.

Bimetallism implies the use of a double standard of value as distinct from monometallism, i.e. a single standard.[1] Two metals are to be freely coined on the basis of a given ratio between their bullion values. It

[1] If three metals were used as alternative forms of money, the system would be *Trimetallism*. If the standard of value were a fixed quantity of one metal plus a fixed quantity of another, the system would be *Symmetallism*.

must not be confused with a coinage system (like the British) composed of a standard in one metal, and token currencies in other metals.

Arguments for Bimetallism. Bimetallism has been advocated on the grounds—

(i) That the joint production of gold and silver is more constant than that of either alone, and that the influence on the price level would not be so irregular.[1]

(ii) That the double standard would provide a *compensatory action*, whereby a tendency of prices to rise or fall, if reckoned in one metal alone, would be checked by the retarding action of the other metal.

(iii) That in any case the supply of gold for a world monometallic system is insufficient. (This argument became less popular after the South African gold discoveries.)

(iv) That it would secure a par of exchange (i.e. an equivalence between the metal values of coinages) between gold- and silver-using countries.

Arguments Against Bimetallism.

(i) That it is practically impossible to keep the Mint ratio as coins identical with the Market ratio as bullion values.

(ii) That any variation in the ratio would cause Gresham's Law to operate and drive the under-rated currency out of circulation.

(iii) That the effective coinage would alternate between gold and silver, according to variations in their bullion-values.

(iv) That, apart from these difficulties, an international agreement would be indispensable, but not easy to secure and maintain.

The agitation over bimetallism is not so strong as formerly. The single standard is now almost universal.]

[1] The inter-relation of money and prices will be considered in greater detail in the next chapter.

CHAPTER XIII

MONEY AND PRICES

Section 1. *The Value of Money*

THE VALUE OF MONEY.

THE value of money is the power that money has in exchange for other commodities, i.e. its purchasing power.[1] A rise in prices, therefore, means a fall in the value of money, and a fall in prices means a rise in the value of money. Changes in the value of money are measured by changes in the general level of prices.

It was seen in the chapters on Value, that an increase or decrease in the supply of anything tended respectively to lower or raise its value, and that an increase or decrease in the demand for anything tended respectively to raise or lower its value. One must emphasize the fact that the value of money is determined in no exceptional way, but follows conditions of supply and demand.

It may be stated that—

(i) *An increase in the quantity of money, unaccompanied by an increase in the quantity of goods, tends to lower the value of money* (*i.e. to raise prices*).[2]

[1] The *value of money* must be distinguished from the *price of money*. The latter is the money market term for the charge that is made for the use of money for a certain period, and is equivalent to the rate of interest or discount. (Chap. XV, § 1.) It is also necessary to demarcate between the value of money and the value of gold as a commodity.

[2] Note that the level of prices and the value of money are not cause and effect, but are different ways of expressing the same thing.

(ii) *A decrease in the quantity of money, unaccompanied by a decrease in the quantity of goods, tends to raise the value of money* (*i.e. to lower prices*).

(iii) *An increase in the quantity of goods, unaccompanied by an increase in the quantity of money, tends to raise the value of money* (*i.e. to lower prices*).

(iv) *A decrease in the quantity of goods, unaccompanied by a decrease in the quantity of money, tends to lower the value of money* (*i.e. to raise prices*).

THE QUANTITY THEORY OF MONEY AND PRICES.

The tendencies just formulated are the basis of the Quantity Theory of Money. *In its earliest and crudest form, the theory stated that general prices are directly proportionate to the quantity of money in circulation*, i.e. an increase of (say) 100 per cent in the amount of money would automatically bring about an equal rise in the general price level. The argument in a very simple form ran thus: imagine an isolated country with a million units of currency, all of the same amount, and a million commodities, also of the same value. If each commodity exchanged once, the price would be 1 unit of money. Suppose now the supply of money for some reason doubled in quantity, the amount of goods remaining the same. Each commodity would now exchange for 2 units of money; in other words, the general level of prices would be doubled.

While it is true that an influx of gold and silver is usually followed by a rise in prices, an alteration in the one does not necessarily cause an *equal* alteration in the other. The 100 per cent increase in money might be followed by either a 200 per cent or a 50 per cent rise, or indeed by an actual fall in prices. Obviously some modification of the theory had to be made.

The Quantity Theory, in its modified form, takes account of the following qualifying factors—

(i) **Credit documents and notes that effectively serve as money.** One reason for the rise in prices during the war was the increased amount of paper money in circulation, and the extra facilities for the creation of credit, both of which were tantamount to so much extra demand for goods and services.

(ii) **Rapidity of circulation of money and money substitutes.** What counts is the work actually done by money and its substitutes. Hoarding means a reduction in the amount of *effective* money. On the other hand, the frequency with which a piece of money changes hands tends to increase the effectiveness of money. The same applies to money substitutes, such as cheques and bills. A pound note, which, in a given period, circulates five times, does as much work and exercises the same effect on prices as a five-pound note which only changes hands once.

(iii) **Volume of trade.** An increase in the amount of money and in the rapidity of circulation tends to raise prices. They both add to the supply of effective money, and thereby lower its value as a purchasing medium. An increase in the volume of trade, on the contrary, tends to lower prices, for it means that the money available has more work to do. It is, in effect, an increased demand for money, which thereby rises in value as a purchasing medium.

The volume of transactions is influenced by—

(*a*) Total amount of goods produced.

(*b*) Efficiency and organization of production.

(*c*) Number of times the goods change hands before final consumption.

If it be contended that an expansion in trade is often accompanied by a rise in general prices, the probable

explanation is that, at such a time, credit facilities are extended, the supply of effective money thus increases, and more than offsets the tendency to a fall in prices caused by an increase in the demand for money.

A caution is necessary in applying the quantity theory, which, like other economic laws, expresses a tendency rather than a rigid formula. Various schemes for the reform of the currency have been devised, resting largely on the assumption of an immediate reflex action of the quantity of money on the level of prices. (*See* pp. 191-193.) But the currents and counter-currents in modern exchange are too numerous and diverse to permit of instant and automatic regulation by manipulation of the quantity of money. In a short period, the amount of money might be reduced and prices still continue to rise, while an increased money supply might be accompanied by a rise in prices. Further, too drastic action might cause more harm than good. A sudden restriction in credit facilities (as in 1920-21) might result in traders throwing their stocks upon the market to such a degree that prices are brought below a healthy level.

To sum up the above "*equation of exchange,*" one may say that **the level of general prices tends to vary directly with the quantity of money and the rapidity of circulation (together equivalent to the supply of effective money), and inversely with the volume of trade (equivalent to the demand for money).**[1]

[1] This may be expressed by the formula—

$$P \propto \frac{M \times R}{V}$$

Where P = Level of prices,
M = Amount of money in circulation,
R = Rapidity of circulation, and
V = Volume of trade.

FALLING, STEADY, AND RISING PRICES.

Falling Prices	Steady Prices	Rising Prices
Are Beneficial to people whose incomes do not fall at the same rate, e.g. fixed-interest stock holders, employés and others whose remuneration is governed partly by custom or contract, etc. Creditors for specific sums benefit as money appreciates in purchasing value.	From the standpoint of trade in general, and in view of the necessity for long dated contracts, steady prices *are a great advantage*, enabling forecasts to be more accurately made and acted upon.	*Are Beneficial* to manufacturers and others whose products rise in price faster than the expenses of production. Also in so far as they might stimulate trade, though real and artificial prosperity should not be confused. Debtors for specific sums benefit as money depreciates in purchasing value.
Are a Matter of Indifference to those whose incomes vary in the same proportion, e.g. wage-earners on a satisfactory cost-of-living sliding-scale.		*Are a Matter of Indifference* to those whose expenses and incomes increase in the same proportion.
Are Harmful in so far as they mean falling net receipts and cause restriction of business activity. Also where they occur at the expense of *real* wages. Debtors for specific sums are adversely affected (*see* above).		*Are Harmful* to those whose incomes do not rise at the same rate. Creditors for specific sums are adversely affected (*see* above).

MEASUREMENT OF THE PRICE LEVEL. INDEX NUMBERS.

Changes in the prices of particular commodities are of little assistance in computing the value of money; especially as the prices of some things may be rising while the general price level is falling. But if a large number of representative articles and services are taken, and their general average trend is observed, movements in the value of money can then be satisfactorily deduced.

A certain year is taken as a basis of comparison, the index number usually being fixed at 100. If the general level of prices rises by 15 per cent, the new index number is 115. If it falls by 15 per cent, the index number is 85.[1]

There are various methods adopted of arriving at an index number (e.g. the *Economist*, the *Statist*, the Sauerbeck systems, and those followed by the Board of Trade and Ministry of Labour), but their governing principles are fairly similar.

Construction of Index Number.

(i) A large number of commodities should be taken. (The ideal index number would include services as well as material things.)

(ii) These should be representative of as many different types of product as possible. A preponderance of foodstuffs or manufactured articles in the selection would " overbalance " the index figure.

(iii) Since the wholesale prices are less variable than retail prices, it is easier to base calculations on the former. On the other hand, in " Cost of Living " tables, it is not always satisfactory to take the wholesale

[1] A fall of 10 " points " is not necessarily the same as 10 per cent. When the index number is reduced from 200 to 190, the fall is one of 10 points but only 5 per cent.

figure, as a fall in this may take place long before the corresponding fall in retail prices. A reduction in wages based on such a form of sliding scale is not justifiable; for such purposes retail prices are preferred.

(iv) Also for reasons of less variability, the prices of raw materials are preferred to those of finished articles. This may be open to the same objection.

(v) Some commodities enter more into consumption than others, *cf.* bread and silk. If a simple average were taken, a rise in the price of bread might be cancelled by a fall in the price of silk, thus unaffecting the index number, notwithstanding the fact that much greater quantities of bread are consumed than of silk.

Accordingly, the device of "**weighting**" is adopted. *Each price is multiplied by a number calculated to represent the relative importance quantitatively of the commodity in question.*

Suppose at a given time, the price of bread is 4d. per loaf and that of a silk length is £2.

The price of bread rises to 6d. and that of the silk length falls to £1.

Taking a simple average,

In 1st Period.		In 2nd Period.	
Bread	= 100	Bread	= 150
Silk	= 100	Silk	= 50
Average Index No.	= 100	Average Index No.	= 100

This would indicate that in the 2nd period there has been no depreciation of the value of money, which the average consumer knows to be untrue. More in

keeping with common experience would be the result of a weighted average.

Suppose bread and silk are consumed in the proportions of 7 to 1.

Then—	In 1st Period.		In 2nd Period.	
	Bread (7 units)	= 700	Bread (7 units)	=1050
	Silk	= 100	Silk	= 50
	Average of 8 units	= 100	Average of 8 units	= 137½

i.e. the "Weighted" Index Number for bread and silk = 137½.

This principle applied to all the articles gives an index number more in accordance with the real change in the purchasing value of money.

[It is also suggested that a geometric mean is more accurate than a simple arithmetic average in arriving at a precise index number.]

As index numbers are at present constructed, there are certain **difficulties.**

(*a*) The articles chosen are too limited, in both number and scope. Such things as house-rent, cost of travelling, amusements, etc., are usually omitted. The selection in any case must necessarily be arbitrary.

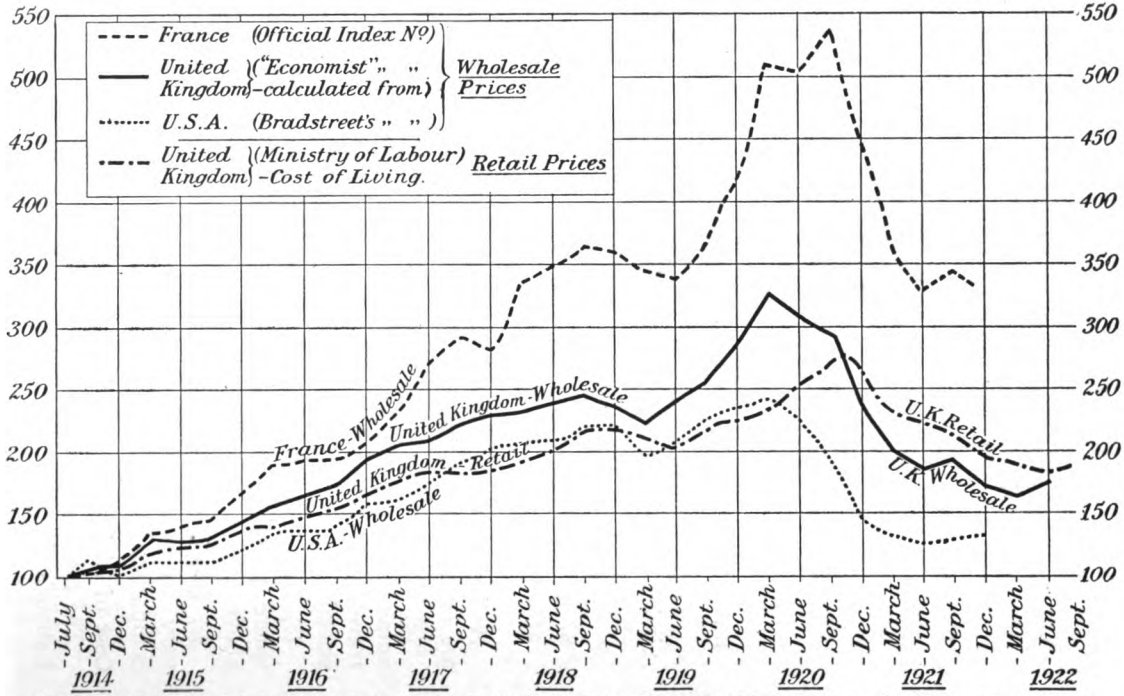
(*b*) Restriction to raw materials and wholesale prices, where practised, involves the objections mentioned above.

(*c*) Qualities, gradings, and descriptions of articles vary so much, that precision of calculation and comparison is rendered difficult.

Cost of Living Index Numbers.

The table on p. 191 is compiled from the Ministry of Labour's figures. The "peak" (176 per cent above

GRAPHS SHOWING COURSE OF PRICES SINCE JULY, 1914, IN THE UNITED KINGDOM, FRANCE, AND THE UNITED STATES. JULY, 1914 = 100



NOTES ON GRAPH—(*a*) Prices rose more in France, less in the United States, than in the United Kingdom. Conditions of the currency are partly the reason. The general trend, however, is similar; (*b*) Retail prices in the United Kingdom are seen to rise and fall less quickly than wholesale prices.

July, 1914, i.e. Index No. = 276) was reached in November, 1920.

AVERAGE PERCENTAGE INCREASE OVER JULY, 1914

MONTH.	1915	1916	1917	1918	1919	1920	1921	1922
1st January	% 10–15	% 35	% 65	% 85–90	% 120	% 125	% 165	% 92
1st April .	15–20	35–40	70–75	90–95	110	132	133	82
1st July .	25	45–50	80	100–105	105–110	152	119	84
1st October	30	50–55	75–80	115–120	120	164	110	

SCHEMES FOR REDUCING PRICE FLUCTUATIONS BY ADJUSTMENT OF THE CURRENCY.

In view of the constantly changing price-level, various proposals have been made for the regulation of the currency so as to reduce the fluctuations in prices.

(i) **Regulation of the amount of currency.** One suggestion is automatically to increase or decrease the quantity of money in circulation according as prices fall or rise. An increased supply of money will cause prices to rise, while a restricted circulation will cause them to fall.

This scheme may be sound in principle, but the practical difficulties in the way are too numerous. It would be almost impossible to gauge exactly the precise amount of money required at any time.

(ii) **Expansion or contraction of gold supply.** A proposal claimed to be more practicable than the above is to make all coins in actual circulation merely tokens, but freely exchangeable against the standard (say, gold). The Government should be under obligation to give,

on demand, gold for token money, and token money for gold. Instead of the exchange-rate of gold being fixed as it is in the present system (in this country at £3 17s. 10½d. per ounce), it should vary with the index number in such a way that as prices tend to rise, the rate of exchange of gold for tokens will fall below the market price; while as they tend to fall, it will rise above the market price. Consequently, when prices are rising, gold can be obtained cheaply; people will find it profitable to purchase it for direct use or export; the amount will thus be restricted, and therefore prices will fall. On the other hand, when prices are falling, a good price is offered for gold; people find it profitable to sell their gold to the Government; the amount will thus be increased, and therefore prices will rise.

(iii) **Adjustment of gold in the standard coin (or bar).** This scheme is somewhat similar to the last one. It is proposed that the amount of precious metal in the standard coin (or bar) should vary according to the index level of prices. *The standard coin need not actually circulate if there is an efficient paper currency.* A rise in prices would be checked by adding to the metal value of the coin; a fall, by deducting from it.

The following is a summary of Prof. Irving Fisher's plan[1] for reducing price fluctuations—

"(1) To abolish gold coins and to convert our present gold certificates [U.S.A.] into 'gold bullion dollar certificates,' entitling the holder, on any date, to dollars of *gold bullion* of such weight as may be officially declared to substitute a dollar for that date.

"(2) To retain the 'free coinage,' i.e. to be more exact, the unrestricted *deposit* of gold, and to retain also the unrestricted *redemption* of gold bullion dollar certificates.

"(3) To designate an ideal composite or 'goods dollar,' consisting of a representative assortment of commodities, worth, at the outset, a gold dollar of the present weight, and to establish

[1] *Stabilizing the Dollar* (New York), 1920.

an 'index number' for recording, at stated times, the market price of this ideal goods dollar in terms of the gold bullion dollar.

"(4) To adjust the weight of the dollar (i.e. the gold bullion dollar) at stated intervals, each adjustment to be proportioned to the recorded deviation of the index number from par.

"(5) To impose a small 'brassage' fee for the deposit of gold bullion and provide that no one change in the bullion dollar's weight shall exceed that fee."

The main criticism of these schemes is that they assume that prices respond promptly to changes in the currency. The quantity theory of money and prices may be true as a general tendency over a long period, but in a short period conditions might be such that an increased amount of money may be accompanied by falling prices, and *vice versa*. Modern conditions are too complex to admit of such a simple regulator.

Section 2. Paper Money

TOKEN MONEY.

Regarded from one angle, a coin is simply an *order* on a person to supply a certain quantity of goods, and is acceptable because its function is continuous and carries on this order from person to person. The reason may be that it contains full commodity value in itself (as a sovereign) or that it is made legal tender by the State and represents specie value. People give 2s. 6d. worth of goods for half-a-crown, not because the coin contains that amount of silver, but because eight such coins are convertible into a sovereign that contains its full value in gold. (For simplicity, present complications are being ignored; these are discussed later.) Gold, silver, and copper coins are orders on goods. Equally effective as an order (and therefore as money) would be pieces of paper, issued and controlled by authority. A pound note and half-a-crown are similar

in that neither contains full value in itself. They are both tokens. They are accepted because they do the work of gold, which is the commodity in which all values are reckoned.

PAPER MONEY.

Paper money, then, is a form of token money, and is acceptable by common consent. Provided that there is no abuse in the issue, paper notes perform the functions of money quite as well as gold and, in some cases, better. Coins gradually lose in metal value by constant wear and tear, and have continually to be replaced at public cost. The loss of a sovereign means not only a reduction in purchasing power on the part of the loser, but also a loss of so much wealth to the whole community. The destruction of a paper note means the same detriment, of course, to the person directly concerned, but causes no equivalent loss of wealth to the community. (Indeed, one way of making a gift to the State is to destroy some Treasury notes, and thus cancel the State's obligation to the corresponding amount. Destruction of Bank of England notes, on the other hand, would only mean a free gift to the Bank's shareholders !)

Paper Money is Principally of Three Kinds.

(i) CONVERTIBLE OR REPRESENTATIVE PAPER MONEY. This form of money represents an equivalent value in coin or bullion " ear-marked " and deposited in a bank vault or State treasury, and is convertible into coin as and when the holder requires. Bank of England notes, with the exception of about 18½ millions fiduciary issue, are of this character. (*See* Chapter XIV, § 3.)

(ii) FIDUCIARY PAPER MONEY—CONVERTIBLE OR INCONVERTIBLE. This is a *promise* to pay, not directly backed by specie, but rather by the faith that the

promissor can inspire. If a State's credit is good, the people will accept the fiduciary paper without demur (witness the trust that the Germans placed in their Government's paper issues during the war). Though part of the Bank of England's note issue is fiduciary, nobody impugns the Bank's credit or note-issue on that account. In this case, the fiduciary issue is convertible on demand into coin.

British Treasury notes come mainly under this heading, for nearly the whole issue is fiduciary. The gold backing is small, but the notes are supposed to be convertible. The position with regard to convertibility of Treasury notes into gold has been much misunderstood. The notes are, on demand, convertible into gold coins at the Bank of England. These coins, however, are not legally convertible into gold bullion, nor is their export or sale permitted. (A sovereign, consequently, has no more legal exchange power than a pound note, so that the inducement to demand gold coins is not very strong.) While a note is convertible into coin, but the latter not legally convertible into bullion, the virtual result is inconvertibility from notes to bullion.

(iii) INCONVERTIBLE OR CONVENTIONAL PAPER MONEY. This represents and promises nothing definite. The circulation is legally enforced, but there is no conversion into coin on demand. It is a means sometimes adopted by a Government, whose resources are low, to pay its debts; and though there may be some kind of promise to redeem the notes eventually, the date may be vague, and the prospects vaguer. Yet, despite the absence of a commodity backing, certain Continental paper currencies, with careful control and limitation, have performed the services of a good money, more or less satisfactorily, *inside their own countries*. As far

as the internal circulation is concerned, it is mainly a matter of law and trust in the State. As a rule, depreciation shows itself more quickly in international, than in internal, exchange, since the law of legal tender does not extend beyond national boundaries, and the foreigner will not accept a depreciated currency except at a discount.

A perfectly regulated paper money would have an advantage over a gold currency in that it would substitute a cheap for an expensive material, and save the heavy costs of minting. The gold so saved could be diverted to use in the arts. This does not necessarily mean that gold would cease to be the standard of value. *A currency might be exclusively paper, yet convertible on demand into gold.* Provided the people freely accept this paper currency (and they will if they have implicit faith in the Government), there is every reason to believe that the paper money will, in ordinary exchange, take the place of gold. But the strength of custom might prove a serious obstacle. And before any paper currency could be perfected for all purposes, some international agreement would be necessary.

Methods of Securing Note Issues.

(i) *Simple Deposit Method.* According to this method, all notes issued are secured by full value in coins or bullion. The disadvantages are—

(*a*) It would be very expensive. The more effective a paper substitute for gold, the more this metal can be released for other purposes.

(*b*) The precaution is really unnecessary, as in normal times a comparatively small proportion of notes is presented for payment at once.

(ii) *Partial Deposit Method.* This system has been adopted by the Bank of England, under the Bank Charter Act, 1844. Above a certain fiduciary allowance, gold secures notes to the full amount.

The drawbacks of the first method are largely obviated by the Partial Deposit Method, the further advantages of which will be evident as the features of the present banking and credit organization are examined.

SIGNS OF OVER-ISSUE OF NOTES.

The following are the principal signs of over-issue. It will be observed that they overlap to a certain extent, and are, in a measure, cause and effect.

(i) **Premium on Gold.** One of the immediate consequences of an over-issue of notes is the rise in the value of gold. This is largely due to the demands of foreigners, unwilling to accept the paper currency unless at a discount. It is also the result of people at home, for different purposes, preferring gold to notes. This leads to

(ii) **Disappearance of Gold.** In accordance with Gresham's Law, the gold is driven out of circulation by hoarding, melting, and exporting.

(iii) **Rise in Prices.** This was explained above.

(iv) **Duplication of Prices.** Where gold and paper circulate together, there may be the peculiar phenomenon of two sets of prices (i.e. relatively low gold prices and high paper prices) for the same things.

(v) **Adverse Foreign Exchange.** The reasons for this are discussed in Chapter XVII, § 2.

The *remedy for over-issue* is obvious in theory, but in practice it is often difficult and inexpedient to withdraw the depreciated notes. In the same way as an

over-issue is in some respects similar to a forced levy on the goods of the community, the withdrawal of these notes means that the State is prepared to hand over some of its resources for mere paper. None but a solvent and courageous Government could apply such a remedy by quick and drastic action ; unless conditions were favourable, this might create more difficulties than it solved. But eventually the problem has to be faced. Means should be devised to reduce and, eventually, eliminate the over-issue in such a way as to cause the least disturbance to commercial and financial stability.

CURRENCY NOTES ACCOUNT

Date.	Notes and Certificates outstanding.	Gold Coin and Bullion.	Bank of England Notes.	Ratio of Gold and Bank Notes to Issue.
	£000	£000	£000	%
26 August, 1914 .	21,535	—	—	—
30 June, 1920. .	357,356	28,500	13,400	11·7
29 December, 1920	367,626	28,500	19,450	13·0
29 June, 1921 .	323,884	28,500	19,450	14·8
28 December, 1921	325,584	28,500	19,450	14·7
28 June, 1922 .	293,774	28,500	19,650	16·39
26 July, 1922 .	294,862	27,000	21,150	16·33
16 August, 1922 .	297,350	27,000	21,150	16.19
13 September, 1922	290,021	27,000	21,150	16.60

Maximum Fiduciary Issue[1] 1920 = £320,600,000
,, ,, ,, 1921 = £317,555,200
,, ,, ,, 1922 = £309,988,395

[1] Following the recommendations of the Committee on Currency and Foreign Exchanges, 1918 (*see* Chapter XVIII), the *fiduciary* issue of Currency Notes is limited. The maximum fiduciary issue in one year is the maximum issuable in the following year, i.e. the highest issue in one year, if it happens to be below the maximum permitted, fixes a lower maximum for the ensuing year.

EFFECT OF THE WAR ON THE PRINCIPAL COUNTRIES' NOTE ISSUES

Country.	United Kingdom.	France.	Germany.	United States.
Authority.	Bank of England.	Bank of France (State controlled)	Reichsbank. (State controlled)	Federal Reserve Board.
Normal Method of Note Issue.	Partial Deposit System. Not automatic and self-regulating.	Partial Deposit with Maximum Issue.	Partial Deposit with emergency powers to increase fiduciary issues, on payment of 5% tax per annum on amount over legal limit. Gold reserve at least ⅓ of note issue. System automatic and self-regulating.	Partial Deposit Gold reserve may be reduced on payment of tax, as in Germany. In 1913 it was decided to aim at a central gold reserve of at least 40% automatic and self-regulating.
Outbreak of War.	Powers were given to Bank of England to increase its fiduciary issue but Treasury Notes rendered this unnecessary. The Bank reserve considerably higher than pre-war, permitting corresponding increase in gold-secured notes.	Large creation of paper currency. 26 milliards of francs issued by Bank of France against equivalent loan to State. (Municipal notes have also served for small denominations.)	Limitation of note issue by gold reserve removed at beginning of war. Paper currency replaced coins, and has become very inflated.	As creditor nation, received great influx of gold. Reserves extended, making increased note issue possible without resort to other means.

CHAPTER XIV

CREDIT AND BANKING

Section 1. *The Nature of Credit*

CREDIT AND CREDIT INSTRUMENTS.

CREDIT has been defined as *the transfer of goods in the present for a promise of an equivalent amount of goods to be paid at a certain future time.* It thus involves two factors, *confidence* and *time.*

In ordinary language, a man's credit is good if he is able and willing to discharge any financial obligations he may incur. "Giving credit" carries with it the right of legal action against a defaulting debtor.

A feature of modern commerce is the enormous amount of credit documents issued and accepted every day. The credit system may be likened to a superstructure resting upon a commodity basis. In this country the gold reserves in the Bank of England and other banks serve as a material foundation for credit, though it is obvious that mere possession of gold apart from public confidence would not be sufficient for large credit creation. Indeed, one sign of the trust reposed in the British Government and financial houses is the relatively small gold reserve compared with that in some other countries.

The Principal Forms of Credit Instruments are cheques, bills of exchange, bank notes, promissory notes, Government (and, in certain instances abroad, municipal) notes, postal and money orders, bonds, etc. In this country, Bank of England notes and Treasury notes are legal tender. The element of trust in these kinds of credit

instruments, while very important, is not so direct and personal as in the case of cheques, bills, etc., whose acceptance is not compulsory. Nor is the element of time so marked in bank and Government notes as with the other credit documents, which usually have a limited time to run.

A Bank of England Note is a form of promissory note, pledging payment on demand of the equivalent amount of gold. Since the war, *Treasury Notes* are offered as legal tender in lieu of gold. (These were discussed in the previous chapter.)

The Bank of England is a private institution, but receives its national prominence through serving as banker to the State. People know that they can exchange the notes any time into State money, and that is sufficient reason for their not troubling to do so. Bank of England notes are as acceptable, with just as much confidence in the issuer, as Treasury notes.

A Bill of Exchange is an order, payable in a definite period, addressed by a creditor to a debtor, instructing the latter to pay a sum of money to either the creditor or a third person whom he designates.[1]

Though a bill of exchange may be payable on demand, it is customary for a period of time to elapse (say, three or six months), and as a negotiable instrument it may pass through several hands before the date of maturity, when the person (or bank) who holds it presents it for payment to the original acceptor. The stronger the credit of the first acceptor, the easier it is for a bill to serve effectively as a money substitute. (The importance of the foreign bill of exchange is examined in Chapter XVII, § 1.)

[1] It is termed an "accommodation bill" if it is drawn up and accepted merely for purposes of a loan without any visible commodity basis.

A Cheque is an order on a banker for a sum of money payable on demand. It resembles a bill of exchange in that a creditor (= the drawer) addresses an order to a debtor (= the bank), and that it serves as a negotiable instrument. Because it is payable on demand, the stamp is the same for any amount, whereas in a bill of exchange it is *pro rata.*

USES AND POSSIBLE DANGERS OF CREDIT.

These may be shortly noted—

(i) **Uses.**

(*a*) Makes large-scale enterprise possible.

(*b*) Stimulates and finances production in anticipation of demand.

(*c*) Permits wealth to be transferred to quarters where more economic use can be made of it.

(*d*) Economizes in the use of an expensive gold currency, which in any case would be insufficient in quantity to meet modern requirements.

(*e*) Enables payments to be made at convenient times, and so tides over periods of difficulty.

(*f*) If issued in reasonable amount, credit tends to stabilize trade and reduce fluctuations in prices.

(ii) **Possible Dangers.**

(*a*) An over-issue of credit may promote unwise production and investment, precarious speculation, with danger of " over-production " and serious fluctuations.

(*b*) Too easy credit may encourage extravagance.

(*c*) Where a firm is really insolvent, the granting of credit will only postpone and intensify the eventual failure. The concealment of its weaknesses may involve creditors and others in loss.

(*d*) It is of assistance in the formation of monopolies and other forms of exploitation.

Section 2. The Development of Banking

EVOLUTION OF CREDIT AND BANKING.

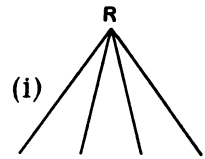
The beginnings of modern banking may be traced to the early goldsmiths, with whom wealth used to be deposited for safe custody, and who made a charge for the service. A depositor who wanted to pay a debt would at first withdraw his money and pay it to the creditor, who might re-deposit it with the same goldsmith. This method was cumbersome. A more convenient and economical system arose, under which the goldsmith, who was well known and trusted, gave a receipt for the money to the depositor, drawn up in such a way that it entitled any holder to claim the corresponding amount of money from the goldsmith. The depositor, instead of withdrawing the sum from the goldsmith or banker, would pay over this receipt to the creditor, who would take the claim to the goldsmith. The first man's account would be debited, and the second would either receive the cash or have his account credited with the sum. Thus claims for large amounts of money could be settled without necessarily employing coin.

But the sum deposited might be so large that the receipt for the total amount was inconvenient for paying debts. Instead, a depositor would be given a number of receipts, each for comparatively small amounts. These were the beginnings of bank notes. Later, they were largely supplanted by cheques.

The goldsmiths or bankers also discovered that, although some money was continuously being withdrawn, the amount demanded at any time was always less than the total sum in hand. A surplus could be put away, as it were, in a special safe which need rarely be opened. Coupled with this was the fact that he was

constantly being asked for loans, good security being offered. Naturally he thought of the money lying idle in his custody. The obvious step was to lend out some of the surplus at interest and make a profit. One can imagine that depositors who might object would be pacified by a remission of the charges for the "safe deposit," and an actual payment of interest for the privilege of looking after their money. The difference between the rates of interest paid to the depositors and charged to the borrowers constituted the gross profits of the banker.

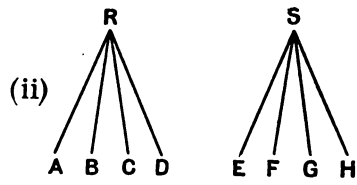
The evolution of banking practice can be explained by a few illustrations.



(i) Suppose R to be the only bank in a small town, and that A, B, C, D, etc., are townsmen who keep their accounts only with R. Then if A wishes to pay C some money, he draws a cheque on R and hands it to C, who pays it into the bank. A's account is debited, and B's accounts credited, with the amount.

(ii) Suppose another bank, S, commences business in the town and receives the custom of E, F, G, H.

If A wishes to pay G a sum of money, he draws a

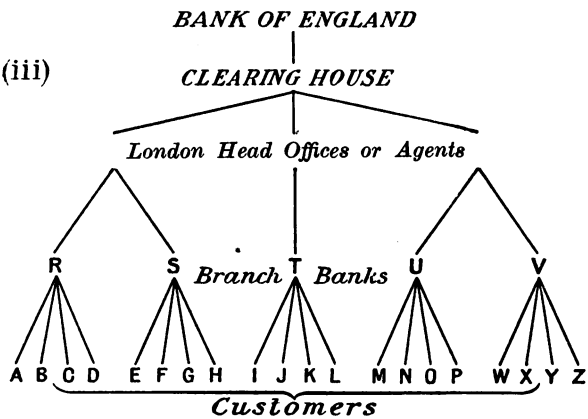


cheque on R, and hands it to G, who takes it to S, who receives it on behalf of R. In the same way, R receives cheques on behalf of S. At the end of a day

or other agreed period, representatives of R and S meet and present each other with a claim equal to the total of all cheques received on behalf of the other bank. The difference at this stage may be paid in cash.

(iii) The need to pay even the differences in cash is obviated when the banks mutually arrange a Clearing

(iii)



House, at which representatives of R, S, T, U, V, etc., meet, cancel mutual indebtedness, and pay the differences by drafts on the deposits that each bank keeps at the Bank of England.[1]

CREATION OF CREDIT.

Bank loans are rarely given in cash. A trader who borrows from a bank usually has the amount of the loan credited to his account. Suppose he borrows £1,000. The bank receives securities for that amount, plus a certain proportion to allow for possible depreciation. The account books of the bank now show an increase in liabilities and assets. Crediting the trader

[1] The Clearing House system is considered further on pp. 208-210.

with £1,000 has in effect increased the deposits (i.e. the bank's liabilities) ; the securities, on the other hand, swell the assets of the bank. Increases in bank loans are almost always accompanied by increases in bank deposits. It follows, therefore, that an increase in deposits does not necessarily indicate a gain in real wealth. During the war there was an enormous expansion of deposits, but this was largely due to borrowing for war purposes. Wealth consumed in this way was not reproductive, and the addition to the deposits signified diminishing rather than growing real wealth.

When the State issued War Loan stock, people often borrowed from the banks in order to lend to the State. Credits were created and cheques were drawn against them to the order of the Government, which drew on the deposits to pay for munitions, etc. Credit was still further engineered when a person required a loan from his bank and deposited, say, War Bonds as collateral. More is said about Government financing by bank credits in the section on public borrowings (Chapter XXI, § 1.)

THEORY OF BANKING.

Two questions call for answer—

(i) *On what principle can the bank lend other people's money, maybe for a long period, yet pay the claims made upon it on demand or at short notice?*

(ii) *How much may a bank lend?*

(i) As indicated above, it is found from experience that in ordinary times *only a certain proportion of the deposits is called for by the depositors as a whole at the same time.* Many people use the bank simply to store their wealth and not continuously to withdraw it for business purposes. The banker works on a principle akin to the one governing insurance, i.e. that individual uncertainties and peculiarities are levelled out in the

aggregate. Banking is carried on, then, on the assumption that at any time there will be a surplus of cash deposited over cash required, and that this surplus can be loaned out at a profit.

(ii) The answer to the second question is suggested by that to the first. In theory, a banker need only leave himself just sufficient to pay the anticipated cash demands. In practice, of course, it is impossible to depend entirely on precise calculation, which may be upset at any time by unforeseen circumstances; there must necessarily be a small surplus for safety. The liquid assets of a bank are so distributed that, in the event of unusual or even panic demands for cash, these assets can be quickly mobilized. Some bank loans carry a very low rate of interest on the express condition that they are repayable at very short notice.

FUNCTIONS OF BANKS.

The general function of a banker is "*the exchange of money for credit, and credit for money.*" His particular functions are—

(i) **Receipt of Deposits.**

(*a*) *On Current Account,* whereby the banker is liable to pay legal tender on demand. Usually the banks allow no interest on such accounts, and charge a commission for the service rendered.

(*b*) *On Deposit Account,* whereby the banker is given time to provide himself with funds, and allows interest according to the notice given.

(ii) **Granting Loans.** The bank lends money against security at certain rates of interest. The loan usually takes the form of permission to draw cheques up to the agreed amount.

(iii) **Discounting Bills of Exchange** A holder of a

bill payable at a future date may discount it at a bank which will give him its " present worth," calculated at the current market rate. Bills are a handy asset for a bank to hold, as they can be re-sold at any time, and automatically turn into cash on maturity.

(iv) **Balancing of Payments.** This is done by means of the Clearing House System, which is described below.

(v) **Acting as Agent.** A banker acts in various ways as agent for customers and other banks. Chief among these are—

(*a*) Collection and payment of interest and dividend on stocks and shares.

(*b*) Buying and selling stocks and shares.

(*c*) Transactions in foreign exchanges.

(*d* Acting as trustee, executor, etc.

(*e*) Provision of safe custody of valuables.

(*f*) Serving as clearing agent, correspondent, etc., for other banks.

(vi) **Issue of Bank Notes.** In England, this function is now restricted to the Bank of England, though, in Scotland, bank notes of £1 and upwards are in general circulation and legal tender.

The issue of notes used to be a more important function of banks than it is to-day. Before 1844, there were several note-issuing banks in this country; but the Bank Charter Act of that year strictly limited the issues, making provision for the ultimate abolition of all bank notes other than those of the Bank of England. (*See* § 3.)

THE CLEARING HOUSE SYSTEM.

The Clearing House is an indispensable factor in modern banking. Instead of each bank presenting a claim on every other bank on account of cheques accepted, and receiving cash in return, arrangements

are made for representatives of the banks to meet at frequent periods and balance up the mutual indebtedness. The differences are not paid in cash, but by drafts on the Bank of England, at which the other banks keep deposits. By transfers of debits and credits in the books of the Bank of England, enormous transactions can take place without recourse to cash.

The London Clearing House is the most important, though there are local clearing houses in certain important centres like Birmingham, Liverpool, Leeds, etc. At the local clearings, cheques on local banks only are dealt with, those outside the prescribed radius being cleared through London.

The London Clearing House is, for convenience, divided into three sections—

(i) THE TOWN CLEARING—for all banks in the City area of London.

(ii) THE METROPOLITAN CLEARING—for banks and branches outside the Town Clearing, but within the London Postal District.

(iii) THE COUNTRY CLEARING—for branches and correspondents outside the range of the Metropolitan Clearing.

There are eighteen clearing banks, each of which sends representatives to the London Clearing House four times every day. The London Clearing of cheques in 1920 amounted to 39,000 million pounds, an increase of 10,000 millions on the previous year; in 1921 it fell to 35,000 millions. The first seven months of 1922 showed an improvement of 2,000 millions over the corresponding period for 1921.

London is not only the centre of British finance and commerce, but tends to serve as the world's clearing house. The principal foreign and Colonial banks have

offices in London, while bills accepted by London "houses" have an international reputation for soundness. During and since the war, however, New York has strengthened her position as a financial centre, and endeavours to rival London as the hub of the world's commerce.

COMPARATIVE STATEMENTS OF JOINT-STOCK AND PRIVATE BANKS IN GREAT BRITAIN (EXCLUDING BANK OF ENGLAND) [1]

Year	No. of Banks.	Capital and Reserves.	Deposits.	Total Liabilities.	Cash in Hand and Money at Call and Notice.	Investments.	Discounts and Advances.
		Million £.	Million £.	Million £.	Million £.	Million £.	Million £.
1900	106	101	734	884	181	176	486
1905	82	103	757	924	211	173	485
1910	63	103	855	1,031	232	179	555
1913	60	103	962	1,155	276	167	635
1914	55	102	1,062	1,239	318	199	652
1915	53	101	1,167	1,361	307	386	588
1916	50	100	1,361	1,566	421	402	651
1917	49	103	1,607	1,818	488	422	823
1918	41	114	1,856	2,073	554	454	974
1919	35	127	2,190	2,518	532	525	1,292
1920	33	149	2,292	2,594	534	478	1,452
1921	33	151	2,314	2,582	517	497	1,467

Notes on Above Table.

(*a*) The number of banking firms fell from 106 in 1900 to 33 in 1921. (The number of branches, however, increased from less than 4,000 to nearly 9,000.) This was due, of course, to the great amount of amalgamation. (*See* below.)

(*b*) In that period, the Capital and Reserves only increased 50 per cent, while the Deposits and the Total Liabilities, etc., trebled.

The proportion of Capital and Reserves to Liabilities fell from over 11 per cent to less than 6 per cent ; that of Deposits to Liabilities increased from about 80 per cent to 90 per cent ; the percentage of Cash in Hand, etc., remained constant at about 20 per cent. There was no marked alteration in the percentage of Investments and Discounts, etc., respectively about 20 per cent and 50 per cent of the Total Liabilities.

[1] Calculated from statistics in *The Economist*, 20th May, 1922 (Banking Number).

AMALGAMATION OF BANKS.

The tendency to concentration in industry and trade generally has been very marked in the banking world during recent years. "The Big Five" are now predominant in British banking. The movement towards combination aroused such controversy that, in 1918, the Government appointed a Committee to inquire into the position. The outcome has been that, before further amalgamation can take place, the Treasury must make an investigation and give its sanction.

The advantages and disadvantages of amalgamation of banking firms resemble on the whole those of large-scale enterprise generally (Chapter IV, § 1), but the following may be specially noted.

(i) **Advantages.**

(*a*) Efficient organization and control of banking functions. This is of special importance in time of emergency (as on the outbreak of war), when concerted action is essential.

(*b*) Risks are better distributed.

(*c*) The reserves become more concentrated and better managed.

(*d*) Where private banks are absorbed, the accounts are made public and subject to open criticism.

(*e*) For purposes of international trading, connections and information facilities are improved, thus affording superior and wider services.

(ii) **Disadvantages.**

(*a*) The organization may become too cumbersome for maximum efficiency.

(*b*) Interest in, and special knowledge of, local conditions may be reduced.

(*c*) The concentration of national resources in very few hands might tend to insecurity rather than strength.

(*d*) Perhaps the most prevalent objection of all, and the one mainly responsible for the opposition, is the fear of a banking *monopoly*. Banking is a vital service, and such a monopoly might have disastrous effects.

Section 3. The Bank of England

THE "BANKING" AND "CURRENCY" THEORIES. To understand the position of the Bank of England, it is useful to glance back upon the factors and influences that led to its present policy. During the Napoleonic Wars, cash payments by the Bank of England had been restricted, and it was not until 1819 that the bank notes were again made convertible. The right of issuing notes were practised by a number of banks in addition to the Bank of England. About this time there was much controversy respecting the proper method of note issues, and two conflicting schools of opinion emerged, the *Banking School* and the *Currency School.*

The Banking School. The members of this school contended that the amount of note issues should not be absolutely restricted by the gold reserve, but should be left to the discretion of the bankers. They maintained that if the note issues were limited by the amount of gold backing, legitimate enterprise might be curtailed. It was further held that the note issues could be perfectly convertible, without necessitating a 100 per cent gold reserve.

The obvious criticism of the "Banking Theory" was that too much power and responsibility would be given to the bankers, who might not always be able to exercise sufficient prudence or make a proper judgment.

The Currency School. The advocates of the "Currency Theory" adhered to the principle of a gold

basis, and regarded a bank note as an economical substitute for gold rather than a pure credit instrument. Accordingly they recommended that the note issue be strictly regulated by the amount of gold held, and that banks should only give credit facilities in return for bullion value.

The main criticisms of such a scheme were that the note issues would be too rigid and inelastic, and that difficulty would be encountered in the event of a temporary shortage of gold.

The Currency School were more successful in persuading the Government advisers, and an Act was passed, giving legal effect to most of their recommendations, at the same time not entirely disregarding the views of the Banking School.

THE BANK CHARTER ACT OF 1844.

The following were the chief provisions—

(i) The Bank of England to have two separate departments, namely, the Issue Department and the Banking Department.

(ii) A fiduciary issue against Government Debt (£11,015,100) and other first-class securities to be permitted up to £14,000,000, all notes over this amount to be secured by an equivalent value of gold and silver.

(iii) Silver to be limited to one-fourth of the gold in reserve.

(iv) The Issue Department to give notes for gold at £3 17s. 9d. per ounce.

(v) The Bank of England to have the monopoly of note issues in London and within a radius of sixty miles.

(vi) On a country bank ceasing to issue notes, the Bank of England, by Order in Council, could increase the fiduciary issue by two-thirds of the lapsed note issue.

(vii) No further note-issuing banks to be established, and the existing banks to lose the right of issue on becoming bankrupt, opening in the London area, etc.

(viii) The future issues of the existing banks to be limited to the average circulation for a short period preceding the Act.

(ix) A weekly return of the Issue and Banking Departments to be published.

(x) The existing banks of issue also to forward weekly returns.

Observations on the Bank Act.

(*a*) The Act aimed at regulation and full control of the paper currency, and at publicity respecting the issues and reserves. The Bank of England has now the monopoly of rights of note issue in England and Wales. The last other bank to have these rights was Messrs. Fox, Fowler & Co.; it lost its privilege on amalgamation with Lloyd's Bank in February, 1921.

(*b*) Restriction of note issues tended to limit credit facilities. This was overcome by the increased use of *cheques*, the issue of which was not limited by any statutory bullion reserve. It is possible, therefore, for cheques to be drawn and accepted without an adequate backing, and such an over-issue of cheques might in many ways be as dangerous as an over-issue of notes.

(*c*) It has been maintained that the system of note issue is too rigid and inelastic, that in time of difficulty there is no automatic means of increasing the fiduciary issue. The method usually adopted in time of crisis is to suspend the Act, and give the Bank the right to issue notes unsecured by gold. As is shown in the next chapter, the suspension of the Bank Act is almost invariably followed by a collapse of the crisis.

BANK OF ENGLAND RETURN.

The following is the return for the week ended 19th July, 1922—

ISSUE DEPARTMENT

	£		£
Notes issued . .	144,021,065	Government Debt	11,015,100
		Other securities .	7,434,900
		Gold coin and bullion. . .	125,571,065
		Silver bullion .	—
	£144,021,065		£144,021,065

BANKING DEPARTMENT

	£		£
Capital . . .	14,553,000	Govt. securities .	46,739,853
Rest	3,339,124	Other securities .	76,215,636
Public deposits .	22,174,832	Notes. . . .	19,764,800
Other deposits .	104,466,978	Gold and silver coin	1,831,093
Seven day and other bills .	17,448		
	£144,551,382		£144,551,382

COMPARISON WITH PREVIOUS WEEK AND A YEAR AGO

—	Amount.	Inc. or Dec. on last week.	Inc. or Dec. on last year.
	£	£	£
Rest	3,339,124	+ 28,733	+ 28,984
Public deposits . .	22,174,832	+ 9,562,787	+ 5,238,388
Other deposits . .	104,466,978	− 7,908,081	− 44,819,355
Govt. securities . .	46,739,853	− 363,699	− 35,978,225
Other securities . .	76,215,636	+ 2,552,527	− 6,059,675
Reserve	21,595,893	− 506,100	+ 2,496,174
Note circulation. .	124,256,265	+ 7,560	− 3,461,475
Coin and bullion .	127,402,158	− 498,540	− 965,301
Proportion of Reserve to Liabilities	17%	− $\frac{5}{8}$%	+ 5$\frac{1}{2}$%

Notes on the Return.

I. Issue Department.

Of the total note issue, £18,450,000 is fiduciary. This sum corresponds to the "Government Debt," which has remained unchanged since 1833, and "Other securities." According to the Act of 1844, a certain increase in the fiduciary issue was permissible under certain conditions (see above); but with the lapse of all private bank note issues, the fiduciary issue of the Bank of England has now reached its maximum.

II. Banking Department.

(i) LIABILITIES.

(*a*) *Capital.* The proprietors' capital has also been unchanged since 1833. The stock is fully paid (different from that of the other banks), and the liability of the shareholders is limited.

(*b*) *Rest.* This is a reserve, in the ordinary sense of the word, consisting of accumulated profits. It never falls below £3,000,000.

(*c*) *Public Deposits.* These include Exchequer, Savings Bank, Commissioners of National Debt and Dividend Accounts. The figure varies with the incoming and outgoing of taxes and dividends respectively.

(*d*) *Other Deposits.* This is the largest sum in the Banking Department's accounts, and represents the deposits of the Bank's customers, including the balances of the other banks. It is an index of the amount of money available in the market. When high, it generally means that the banks have a large surplus of unemployed funds, and usually coincides with a low price for money.

(*e*) *Seven-day and Other Bills.* This small sum mainly corresponds to the remittance of funds by Customs and Excise officers to the Bank.

(ii) ASSETS.

(*a*) *Government Securities.* These are the Bank's investments in British Government stocks and bills. They cover the Government's "Ways and Means Advances," etc.

(*b*) *Other Securities.* This item represents the Bank's investments in securities other than the above, and covers advances to its customers.

(*c*) *Notes and Bullion.* This item represents the "Reserve" of the Banking Department, and, in view of its importance, may be considered in more detail.

RATIO OF THE BANK OF ENGLAND RESERVE TO LIABILITIES.

The "Reserve" applies to the stock of specie and notes in the Banking Department, and must not be confused with the gold reserve held by the Issue Department against notes. The proportion of the reserve in the Issue Department is definitely fixed by the Act of 1844. Apart from the strictly limited fiduciary issue, all the notes issued are secured by the corresponding amount of gold. The Reserve in the Banking Department, however, consists of notes from the Issue Department (which are normally convertible into, and therefore as good as, gold), together with a certain amount of specie, distinct from that held by the Issue Department.

Since the Bank of England, in carrying on the practice of ordinary banking, lends out a certain amount of the deposits of its customers (largely the other banks), it is inevitable that the amount of notes and gold must be below that of the liabilities. But the Bank of England is in a peculiar position in that it is the bank of other bankers who themselves have lent out a considerable proportion of the wealth deposited with them. *Their* reserves are deposited to some extent with the Bank

of England[1] and are withdrawable on demand. (No interest is paid on these deposits.) The Bank of England Reserve, therefore, is a first line of defence for other banks in times of difficulty, and it is maintained by many experts that the proportion of reserve to liability should not fall too low.

In ordinary times the policy of the Directors of the Bank of England has been to maintain the Reserve at about 45–55 per cent of the total liabilities. A fall below 40 per cent used to cause uneasiness. The percentage on the 22nd July, 1914, was 52. During the war this fell considerably, and at the end of 1919 was below 10 per cent. Latterly, the proportion has increased ; for the week ended 13th September, 1922, it was 19¼, an increase of 4¼ per cent on the corresponding week in 1921. The low ratio is still seriously criticized, and the return to a more normal proportion is strenuously advocated.

DRAINS ON THE BANK OF ENGLAND RESERVE.

The Bank of England Reserve is liable to a *regular and periodic drain* at certain times of the year when extra amounts of cash are required (e.g. holiday and harvest times, end of the quarter, dates for tax payments, etc.). Similarly, there are certain periods of the year when there is an inflow of money to swell the Reserve. The fact that it is the bank of the State means that taxes and loans to the Government, and dividends on these loans pass through the books of the Bank of England, and influence directly or indirectly the proportion of the Reserve to the liabilities.

In addition to this, the Reserve is liable to an

[1] In recent years, the other banks have been keeping a certain amount of reserve on their own premises, but most of it is still deposited with the Bank of England.

irregular and spasmodic drain, on such occasions as commercial crises, foreign loans, outbreak of war, etc.

When there is a drain on the Reserve, the following are possible courses of action—

(i) **To stop payment of gold on demand.** In ordinary times, such an action might precipitate a panic. So long as the Bank pays gold on demand, people consider the situation with assurance, but the slightest suspicion of the Bank's insolvency will upset the whole of the credit and banking system. The policy of the Directors of the Bank of England in times of crisis is rather to pay gold as freely as possible. Some other means of conserving the Reserve, therefore, has to be adopted.

(On the outbreak of war, the Bank of England was enabled to pay out Treasury notes instead of gold. These notes, while nominally convertible, could at the most be converted only into sovereigns, the export of which or conversion into bullion being forbidden. In any case, the Reserve was considerably depleted. *See* Chapter XVIII.)

(ii) **To offer a high price for gold.** This method might serve to swell the Reserve, but would be very expensive. It would also make the value of gold more unstable than it is. More effective is the third course :

(iii) **To raise the Bank Rate.** This is the method that is usually adopted. Instead of trying to prevent gold from leaving the Reserve, the Bank aims at inducing more gold to come into it. The effects of such action on the Money Market are considered in the next chapter.

CHAPTER XV

THE MONEY MARKET

Section 1. *The Price of Money.*

THE MONEY MARKET.

THE market for money approximates to perfection more than that for any other commodity. This is due to the quickness of modern communication and the ease of transferring credits from one part of the world to another. The cost of this transfer, even where gold has to be sent, is comparatively small. Strictly speaking, the Money Market is not centred in any particular place, but is world-wide in its extent. A feature of the modern credit system is the ready response of money in one country to changes in the demand or supply in another.

In ordinary language, as far as this country is concerned, the Money Market embraces the sphere of operations around the Bank of England and Lombard Street. Besides the Bank of England and other banking institutions, together with the various discounting and accepting houses, it includes brokers and jobbers inside and outside the Stock Exchange, dealers in foreign bills, underwriters, etc. All of these are concerned with the lending or borrowing of money, the lenders being chiefly the bankers, the borrowers mainly the bill brokers and Stock Exchange dealers. The Government, too, is an important factor in the Money Market, and in recent years especially has taken a leading part through its large borrowings and the disbursements of dividends. The rates of interest offered by the Treasury have considerably affected the market,

and at the present time seem to have more influence than the Bank of England rates.[1]

Discount Houses are those institutions that specialize in the discounting of bills. They are of service to dealers who are not prepared to wait until the bills mature, but require ready cash.

Accepting Houses accept bills on behalf of a trader in return for a consideration as a return for the risk incurred. They are necessary in international trade particularly, since a creditor may not have knowledge of a customer in another country, but will unhesitatingly receive a bill which has been accepted on the debtor's behalf by an accepting house of international repute.

Though a few firms confine their activities mainly to discounting or accepting, most of this business is now done by the banks.

PRICE OF MONEY.

While the *value* of money refers to its purchasing power, the *price* of money in the City means the rate that is charged for its use. Like the price of anything else, it is determined by conditions of supply and demand. When money is plentiful, the rate of interest or discount is low; when money is scarce the rate is high.

Interest is the price that is paid for the use of money, and varies with supply and demand, with the nature of the loan, and also with length of the period for which the loan is required.

Discount is the price that is paid in order to obtain immediate realization of a bill or other claim for value which is not yet due for payment by the original acceptor. It is the difference between the face-value and the present worth, and is in effect akin to interest.

The two rates are interdependent, and there cannot

[1] *See* below, p. 225.

be, over a period, any appreciable difference between them. Suppose, for example, the average rate of interest is 5 per cent, and the rate of discount is 3 per cent, and that all other things are equal. Then it is more remunerative to put money into interest-bearing investments than into the bill-discounting market. Therefore there will be a transfer of money to ordinary investment, causing a drop in the interest offered, while the reduction in money supplies for the discount market brings about a rise in the discount rate. Any discrepancy between the rates of interest and discount will be due to differences of market conditions, greater or less risk, etc., rather than to any fundamental distinction between the two rates.

The Bank of England Rate is a discount rate. It is, as a rule, slightly above the rate charged by the other banks, i.e. the **Market Rate.** A rise in the Bank Rate is usually followed by other banks raising their rate; a fall in the Bank Rate is always followed by a reduction in the Market Rate. Since the Bank of England, however, engages in ordinary banking business, it has, in practice, to charge its customers the ordinary market or "street" rate. Were it to demand the higher official rate, its customers would seek accommodation from those bankers who charge a smaller price for their services.

As indicated above, the period of time is taken into consideration in determining the rate of interest. For safety reasons, a bank has to keep a fairly large proportion of its assets as "liquid" as possible, to meet any unusual demand for cash; too much money must not be "locked up." On the other hand, money lying idle involves a certain amount of waste. The banks, therefore, lend out some money to brokers and others, which can be reclaimed "at call or short notice." The

"**Call Rate**" is necessarily lower than the ordinary rate.

The following is a quotation from *The Times* Money Market article, Friday, 14th July, 1922, referring to conditions the previous day. The prices are per cent rates per annum—

"Day-to-day money was quite usable at 2 per cent during the early hours, but floating supplies of credit increased later in the day, and the rate eased to 1½ per cent. . . . Following the reduction in Bank rate the deposit rate of the London Clearing Banks was lowered to 1 per cent and the discount houses also reduced the rates of interest allowed by them by ½ per cent to 1 per cent at call and 1½ per cent at notice. . . . Rates for fine trade bills were lowered by ½ per cent all round.

The Bank rate is 3 per cent, to which it was reduced from 3½ per cent on July 13."

Loans (per cent).		Discount (Bank Bills).				Discount (Fine Trade Bills).		
Day to day	For short periods.	60 days.	3 months.	4 months.	6 months.	3 months.	4 months.	6 months.
1½–2	1½–2	1⅞	1⅞–1 15/16	2	2–2¼	2½–3	2½–3	3–3¼

[At this particular time the Treasury were not borrowing on Bills, and therefore no rate was quoted. A fortnight later (28th July) the above rates were very little changed, while 3 month Treasury Bills were offered at 1⅝ per cent.]

INFLUENCE OF THE BANK RATE.

The Bank Rate is a potent factor in the Money Market, and exercises its influence in many directions. Care must be taken, however, not to attribute unfailing power to this rate; for reasons mentioned below, there may be certain occasions when it has comparatively little effect.

Effects of Raising the Bank Rate.

(i) The other banks and financial houses raise the market rate of discount. Assuming there is a shortage of money, this is almost inevitable. Would-be

borrowers from the Bank of England try to get cheaper accommodation from the other banks, who, partly to secure their own reserves, partly to make a profit, raise their charges, though not necessarily to the same extent.

(ii) This results in dealers and bill holders being less willing to borrow money or to discount bills.

(iii) Since money commands a high rate in the discount market, foreigners are induced to transfer credits to this country; an inflow of gold may result. They will also be willing to extend the credit facilities they have already given.

(iv) For the same reason, stocks and shares will be sold in order to transfer the proceeds to the more profitable discount market. The prices of securities in the investment market will thus tend to fall.

(v) Since a rise in the discount rate is usually followed by a rise in the deposit rate of interest, more money *may* be saved, reducing the immediate demand for commodities, thus also helping to bring about a fall in prices.

(vi) Traders who find it too expensive to borrow money at the high rate may prefer to unload their stocks of commodities, causing prices to fall.

(vii) A fall in prices leads to increased exports, because the foreigner finds it profitable to buy goods here at the reduced price. It also leads to less imports, because the consumer may now purchase home products instead of those of the foreigner, who will divert his goods to places where he can command higher prices. This reduces our foreign indebtedness and therefore the drain on the Reserve. Also, for reasons discussed in a later chapter, it causes the foreign exchanges to move in our favour.

(viii) *The general result, therefore, of raising the Bank*

Rate is to diminish the demand for money at home, and to increase the effective supply; this may be instrumental in bringing about a fall in the Bank Rate, and a return to normal conditions.[1]

The following factors should be observed in connection with the relation of the Bank to the Money Market—

(*a*) *Raising the Bank Rate is only followed by a rise in the market rate if the demand for money is keen.* If it should not be so, the other banks would not necessarily raise their rates, as customers and therefore profit might be lost in consequence. In practice, of course, the Bank Rate is only raised when money is scarce, and the above contingency seldom arises. A fall in the Bank Rate, on the contrary, must inevitably be followed by a fall in the market rate, if the banks wish to retain their custom. The influence of the Bank of England over the Money Market is not now so strong as formerly. The joint-stock banks have increased in size and power in recent years, and do not automatically follow the lead of the Bank as they did in the past.

(*b*) Another factor helping to reduce the power of the Bank Rate in governing market conditions is *the rate of interest paid on Treasury Bills.* The enormous borrowings of the Government in the last few years have been the most influential element in the Money Market, the price of money being determined more by Treasury rates than by the official Bank Rate. The Bank of England has had to fall in with market conditions and its Rate thus serves as an *index* of financial conditions rather than a cause.

[1] When the supply of money is considered too plentiful, and therefore too cheap, the Bank has employed the device of going into the market as a *borrower* on a large scale. As security for the loans, it offers Consols or other Government stock—hence the phrase *Borrowing on Consols.* By thus reducing the supply of money, the Bank is enabled to make its own rate more effective.

Events Preceding and Following a Rise or Fall in the Bank Rate. The following table gives an outline summary of the general trend of events before and after a rise or fall in the Bank Rate. It is essential to note that only tendencies are indicated, which may be offset by the presence of any external factors.

	Events preceding.	Events following.
A Rise in the Bank Rate.	1. Scarcity of money. 2. Great demand for money caused by active trade. 3. Drain of gold, for periodical payments at home. 4. Ditto from abroad caused by "unfavourable" balance of trade. 5. Adverse rate of exchange.	1. Rise of market rate (usually). 2. Higher deposit rate. 3. Discouragement of borrowing. 4. Money transferred from investment market to discount market. 5. Fall in prices of stocks and shares. 6. Fall in prices of commodities. 7. Foreigners extend credits and transfer money here to get higher prices. 8. Increased exports. 9. Improvement in foreign exchange. 10. All this may culminate in a plentiful supply of money.
A Fall in the Bank Rate.	1. Plentiful supply of money. 2. Little demand for money caused by inactive trade. 3. Inflow of gold, through periodical repayments. 4. Ditto, if balance of trade is "favourable." 5. Improved rate of exchange.	1. Fall in market rate (always). 2. Lower deposit rate. 3. Increased borrowing. 4. Flow of money back to investment market. 5. Rise in prices of stocks and shares. 6. Rise in prices of commodities. 7. Foreigners tend to transfer money elsewhere where higher rates can be obtained. 8. Contraction in exports if prices rise too much. 9. Adverse exchange may result. 10. All of which may culminate in conditions akin to those leading up to a rise in the Bank rate.

Section 2. The Stock Exchange

THE STOCK MARKET.

The Stock Exchange, the one in London being the most important, is a market for stocks and shares. The members do not deal in capital for fresh enterprises as much as transfers of capital already invested.

Values of securities frequently vary so much during a day's dealings that it would be very cumbersome to make a formal contract every time a transaction is effected; besides, while inquiries respecting the other party were being made and a contract being prepared, the price of the stock might have changed. Instead, agreements to buy or sell are made in a moment or two and on the spot. This implies a large amount of trust between the dealers in the Stock Exchange, the membership of which is strictly limited.

The members of the Stock Exchange consist of stock-brokers and stock-jobbers.

Brokers[1] do not usually act as principals, but serve rather as agents between the jobbers and the public. They make their profit on the commission, and rarely carry any appreciable amount of stock on their own account.

Jobbers are usually specialists in particular branches of the stock and share market, and deal on their own account. They make their profits, therefore, not from commission, but from the difference between their buying and selling prices. The jobbers do most of the speculation in the Stock Exchange, often "selling forward" (i.e. promising to deliver certain shares at a future date) and similarly contracting to purchase them.

[1] Distinguish from the bill-brokers who are not members of the Stock Exchange, but specialize in the sale and purchase of foreign bills.

(In addition, there are a number of outside brokers who effect transactions through the members of the Stock Exchange.)

DEALINGS ON THE STOCK EXCHANGE.

The jobber on being asked by a broker, acting on behalf of a client, for a quotation, states two prices, the lower one at which he is prepared to buy, the higher at which he is willing to sell. This is the "*jobber's turn.*" The bargain may be either on credit or for cash; if the former, it is either put down "for account" or for "Settling Day." Failure to meet liabilities on this day may mean being "hammered" and dismissed from the Exchange.

Contango brokers are those who lend to other brokers who need money for the "Settlement." Instead of advancing a loan in the ordinary way, they act as pawnbrokers for shares. For a consideration, they "carry over" the shares in question until the next settlement day.

Backwardation is the opposite of Contango. If a broker has guaranteed delivery of certain shares, but cannot obtain them for the time specified, he may borrow those shares from somebody who happens to have them, depositing an equivalent sum of money as security, to be returned when the shares are paid back. The commission for this service is known as "Backwardation."

Classes of Business and Securities.

Dealings on the Stock Exchange may be classified according to whether they are purely speculative in character or for purposes of investment. (Speculation was examined in Chapter IV, § 1.)

The market for stocks and shares is divided into certain groups depending on the nature of the security

(e.g. Government Stocks, Industrials, Railways, Foreign, etc.).

It is unnecessary here to give an account of all the different forms of stocks and shares. The following are the main kinds, and are given in the order of their claim upon the profits of a company or assets in the event of winding up—

(*a*) *Mortgage Bonds.*
(*b*) *Debentures.*
} These are loans rather than shares in the business, and receive a fixed interest.

(*c*) *Preferred Shares.* These have first claim of the shares proper, and receive a definite interest, with the possibility of some extra return if "Participating," and retrospective interest if "Cumulative."

(*d*) *Ordinary Shares.* These involve more risk than the previous classes, and in times of good business receive higher dividends.

(*e*) *Deferred Shares.* Dividend on these shares, where the latter exist, is not paid until the previous classes have received their minimum return.

As mentioned in the analysis of interest, the proportion of pure interest (i.e. the payment for the use of capital apart from reward for risk) in the return diminishes as one passes from mortgage bonds to deferred shares.

Section 3. Financial Crises and Trade Cycles

FINANCIAL CRISES.

The main features of a commercial and financial crisis may be stated here very briefly. For various reasons, traders find themselves in difficulties and seek to borrow an unusual amount of money from the banks. Stocks and shares are sold, their prices fall, and banks discover

that their collateral and assets are dwindling in value. The public, too, are infected with the prevalent feeling of insecurity, and many withdraw their deposits from the banks, who, in turn, withdraw their reserves from the Bank of England, and call in the short loans.

The Bank of England is subjected to a heavy strain. On the one hand, its clients are withdrawing their deposits; on the other hand, partly owing to the other banks' cessation of lending, there are more people than ever wanting to borrow money. The depletion of the Reserve serves to intensify the situation.

The policy of the Bank of England at such times is to lend as freely as possible. The psychological effect of such an action is incalculable. To stop loaning or paying cash for notes would make the crisis worse. If the situation is too serious to be countered by merely raising the Bank Rate, the method adopted is to *suspend the Bank Charter Act of* 1844. The Bank is thus enabled to increase its fiduciary issue of notes, and lend them to the would-be borrowers.

In almost every case, the suspension of the Bank Act has been followed by a collapse of the crisis. Only once (1857) was it found necessary to take advantage of the suspension and swell the fiduciary issue. On the outbreak of the recent war, the Bank Act was suspended, but the issue of Treasury notes rendered unnecessary an increase in the Bank's fiduciary issue. (The crisis in 1914 and the emergency measures adopted are considered in Chapter XVIII.)

TRADE AND CREDIT CYCLES.

Though financial crises and industrial depressions are largely inter-related, the latter, for convenience, may be considered separately.

In the succession of times of good and bad trade

throughout the nineteenth and twentieth centuries, two elements have been observed—

(i) The Synchronizm of conditions in different trades at the same time.

(ii) The Periodicity of fluctuations.

(i) **Synchronizm.** With the specialization of individuals, localities and nations, industries grew to depend increasingly on each other for supplies and custom. Division of labour means interdependence. When the credit and banking system evolved to its present importance, it served to bind the interests of the various industrial and commercial groups closer than ever. It became inevitable, therefore, that a " boom " or a " slump " in one branch should synchronize with similar conditions elsewhere.

(ii) **Periodicity.** These periods of good and bad time appear to have occurred with a certain amount of regularity. At first, it was thought that the full cycle of events lasted about ten years, but later the estimate was reduced to seven years.

THEORIES OF TRADE CYCLES.

Trade cycles have been the subject of much investigation and theorizing. The following are the chief attempts at explanation that have been submitted—

(i) **Theories Based on the Climate.** It used to be contended that regular variations in the climate were responsible for the cycles in trade. Jevons, for instance, suggested that the spots on the sun changed their position with regularity, thus affecting the heat emitted. This was said to influence the nature of harvests, and therefore, since agriculture is the basic industry, all branches of economic effort would be similarly placed.

Though the sun-spot theory is no longer believed in, there are still some who maintain that climate and

harvest conditions are at the root of commercial fluctuations.[1]

(ii) **Psychological Theory.** Some contend that the psychological factor is the most important. The synchronizm and periodicity are all a matter of action and reaction on human nature. When trade is good, people are optimistic. They buy more and prices rise. Production is stimulated. Similarly when trade is bad, people are pessimistic, they stop buying, prices fall, and production is checked. Prosperity and depression of trade are the result of the state of people's minds.

This theory undoubtedly contains much truth, and no explanation can afford to ignore the psychological element. The theory alone, however, does not satisfactorily account for the change from one set of conditions to the other.

(iii) **The Credit and Over-production Theory.** This explanation is the one most commonly put forward; it accounts for the trade cycle in the following way: To commence with, suppose trade to be improving. There is a keen demand for money to assist in further production, and credit facilities are extended. Prices rise because of the greater amount of effective money in circulation, and this may encourage still further production. New firms, attracted by the profits, enter the field, and for a time there is general prosperity. Speculation may go beyond legitimate bounds. In the absence of any co-ordination, or satisfactory index of

[1] Sir William Beveridge, in the *Economic Journal* (1920–21), from observation of meteorological and trade conditions, suggests that there may be some real connection between climate and the export trade. While recognizing that this suggestion, if proved, establishes the climatic explanation (though not the details) offered by Jevons, he would only admit it to be one cause of cyclical fluctuations of industry. "There are some causes of fluctuation—financial, industrial, and social—clearly independent of the climate and the export trade."

the exact amount of goods that can be economically produced, there is the risk of false optimism causing too much to be produced for the existing demand. The result is a fall in prices. This leads to a restriction in production, firms near the " margin " may disappear, banks call in their credits, and for a time there is a general depression. After a while it may be found that too little is being produced to meet the demand. The shortage of goods sends prices up again ; production revives ; and so, with the improvement in trade, the complete cycle is completed.

(iv) **The Over-savings or Under-consumption Theory.** This theory, which has been mostly developed by Mr. J. A. Hobson,[1] may be briefly summarized. Instead of looking to the misapplication of capital and labour, he regards the action of the *unproductive surplus* (i.e. a form of rent) in one's income as the source of trade fluctuations and periodical unemployment. This surplus is said to stimulate automatic saving to an extent greater than is strictly necessary. Over-saving is under-consumption ; some existing capital goods cannot function in production, and therefore there is congestion of the industrial system with unsold products. This brings about a reduced demand for labour and capital, a period of low production, and consequently a fall in the social income. But this means that there is now less " surplus " to save, and thus begins a process of recuperation. For a time there is the right adjustment between " real " capital and the rate of consumption, but eventually the " chronic impulse due to surplus income again becomes fully operative, preparing a new period of depression."

In this theory also there is more than an element of truth, but the distinction between necessary saving and

[1] *The Industrial System*, Chapter XVIII.

over-saving should be made clear. At a time when, following an expensive war, the cry is all for "economy," the plea for less saving may seem rather out of place. A country which has lived on her capital for several years finds real saving more urgent than ever. Even in ordinary times, while Mr. Hobson deprecates too much saving, it is equally true that there can be too much spending; money expended on luxuries is not so serviceable to the whole community as that spent on necessaries. Yet these statements are not contradictory; from examination they are seen to be largely supplementary.

Counteracting Measures.

Whatever may be the true explanation of trade cycles, there is reason to believe that they can be counteracted to a certain extent, if proper measures are taken. The use (or abuse) of credit is a very important element, and when business is good, care should be exercised not to foster "illegitimate" speculation by too easy credit facilities. This helps to prevent the tendency to over-production. When the possibility of a crisis is looming in the near future, supplies of cash and credit should be made readily available for those who are in temporary difficulty. This helps to counteract the crisis.

CHAPTER XVI

INTERNATIONAL TRADE

Section 1. *The Theory of International Trade*

DIFFERENCES BETWEEN HOME AND INTERNATIONAL TRADE.

THOUGH the fundamental principles governing international and home trade are similar, there are certain important distinctions that have to be noted. These differences are *not* due to costs of transport, which have to be reckoned in the normal expenses of production. Since the transport cost between Dover and Calais is less than that from Dover to Dundee, it cannot be considered the deciding cause of difference between home and international trade.

The main differences are due to the *immobility of labour and (to a smaller extent) of capital.* The "flow" of labour at home is relatively free compared with that between two countries. Despite the possibility of economic gain if he goes abroad, a man may prefer to stay at home for reasons of sentiment and patriotism. Language difficulties and differences in the monetary systems also tend to retard international relations.

While capital is not subject to the same personal preferences as labour, and is therefore not so immobile, it will, other things being equal, be invested at home rather than abroad. As a rule, a much higher rate of interest is necessary to induce capital to go abroad.

Foreign Trade is a Form of Barter.

In the early days of foreign trade, imports were paid for very often in gold and silver. Such a policy

to-day would be very uneconomical, even if it were possible—

(*a*) The volume of transactions is too high for the existing stock of specie.

(*b*) Movements of gold, etc., entail expense and risk.

(*c*) The precious metals would be diverted from internal use as currency and in the arts.

It is to the general interest, therefore, to reduce the payments in specie to the minimum. This is done by bringing together all the exports of a country, and balancing them against all the imports. The difference may be paid in gold, which in any case ought to be reckoned among a country's exports or imports.

Exports Pay for Imports. By means of the modern credit system, trade to the value of thousands of millions sterling takes place annually with very little recourse to the export of gold. (Even South Africa, which is the principal gold-producing country, does not necessarily *export* all the gold purchased from her. The Bank of England, her chief customer, allows a considerable amount of gold to remain there as part of its reserve.)

Barter is at the basis of all exchange, but shows itself more prominently in international trade. Imports of food and raw materials and exports of manufactured goods are reckoned in terms of money; but, in practice, the transactions are completed by mutual cancellation of debts. The foodstuffs and materials are thus paid for in effect by the manufactured goods. When the international credit system breaks down, actual barter may be resorted to. This was evidenced recently in the direct exchange of goods for goods between British and Russian merchants.

It follows, therefore, that, *in international trade, even more than in home trade, money is of more*

importance as a measure of value than as a medium of exchange.

THE LAW OF COMPARATIVE COSTS.

Foreign trade is in effect an international division of labour. Each country tends to specialize in the production of those commodities for which it is best fitted. This does not mean that a country will necessarily specialize in a commodity simply because the real costs[1] of production are lower than elsewhere, but that it will supply those things in the production of which it has a *relative* advantage over another country. This is in accordance with the Law of Comparative Costs, which, as applied to international trade, states that **a country tends to produce those things for which it has the greatest comparative advantage.**

It should be observed that while the law of comparative costs has special reference here to international trade, it *applies to all forms of economic activity.* Though a business man might be able to do clerical work better than a hired clerk, it may be to his advantage not to do this relatively less productive work, but to devote his whole time to the higher functions of business which render him greater returns. Similarly, a stores manager might be a better salesman than a man at the counter; but it is to the firm's benefit to utilize his services of managing which, as it were, have a relative advantage over those of a counter assistant.

Illustrations of Comparative Costs.

In the following examples, for the sake of simplicity, the expenses of transport are not considered; in practice, of course, they enter into the total cost of production. Perfect freedom of trade is also assumed.

[1] For the distinction between real and nominal costs, *cf.* real and nominal costs of labour, Chapter VIII, § 1.

(i) Suppose there are only two countries, A and B—

A	B
Can produce wheat at £1 per bushel and cloth at 10s. per yard	Can produce wheat at £2 per bushel and cloth at £1 per yard

Under such conditions, A, being the cheaper country for both commodities, will export wheat and cloth to B, which will send money in return. Therefore (in accordance with the Quantity Theory), prices will rise in A and fall in B until the respective costs of production are equal in A and B, say, 30s. for wheat and 15s. for cloth. No advantage will now accrue to exchange, which will cease on this point being reached.

In both countries the relative costs were as 2 to 1. Neither country had a permanent advantage in relative costs, and, therefore, permanent exchange was impossible.

(ii) Suppose, now that A and B have different *relative* costs of production,

A	B
Can produce wheat at £1 per bushel and cloth at 10s. per yard	Can produce wheat at £3 per bushel and cloth at £1 per yard

Again, A has an advantage in both commodities, and will export wheat and cloth to B until, for the monetary reasons stated above, costs rise in A and fall in B. The time may arrive when wheat costs 30s. in A and £2 5s. in B, while cloth costs 16s. in both countries. A point of indifference respecting cloth has been reached, but wheat will still be exported from, and money still flow into, A, until the cost of cloth might conceivably be 17s. in A and 15s. in B. Permanent trade, therefore, is possible.

A will specialize in and export wheat ;
B ,, ,, ,, cloth.

Advantages of Foreign Trade.

Another way of regarding the same situation, and showing the advantage of international trade, is to examine the total costs of production for the two countries together, before and after specialization.

Before specialization,

A	B
50 bushels wheat cost £50	50 bushels wheat cost £150
50 yards cloth cost £25	50 yards cloth cost £50

Total cost of 100 bushels and 100 yards = £275.

After specialization,

A	B
100 bushels wheat cost £100	100 yards cloth cost £100

Total cost of 100 bushels and 100 yards = £200.

From this it is evident that international specialization means economy of production. Strange as it may seem at first, it also follows that *it may pay a country to import something from another, even though she can produce it herself more cheaply.* The explanation lies in the comparatively greater productivity that she may have in respect of another commodity.

Foreign trade indicates a wide territorial division of labour, the benefits of which may be shortly summarized.

(i) Each country under free market conditions tends to produce those commodities for which it is naturally adapted. This means that the world's productivity is increased, permitting prices to be lower than otherwise.

(ii) People of one country can enjoy such foreign goods as cannot be produced at home.

(iii) Where supply and demand are spread over a large area, prices are more stable.

(iv) For similar reasons, local shortages do not cause as much inconvenience if supplies can be had from elsewhere.

(v) Since in time of war the above advantages are lost, the mutuality of trade relations and the recognition of economic interdependence may make eventually for international peace.

Section 2. Protection and Free Trade

VIEWS ON FOREIGN TRADE.

International trade was hindered between the fourteenth and sixteenth centuries by the prevalent objection to importing goods of other nations. As exports, however, must be met by imports of some kind, the early *Bullionists*[1] stipulated that, as far as possible, only gold and silver should enter the country, these being regarded as the staple forms of wealth. In accordance with this view, various measures were adopted to encourage the export of goods and the import of specie, while the export of specie and the import of goods were looked upon with disfavour.

When it became recognized, about the time of the Tudors, that there were certain foreign goods apart from specie that a country must have, the bullionist doctrine began to lose ground, and was replaced by the policy of *Mercantilism*. This, to a great extent, was only a modified form of the bullionist principle, in that it still aimed at an inflow of gold and silver. The difference was that it permitted of importation of other goods, provided that such imports were less than the exports (i.e. a "favourable balance of trade"); the excess of exports over imports was to be paid in specie. Steps were also taken to restrict the importation of such goods as could be produced at home. Protective duties, bounties, and other forms of preferential treatment were

[1] *See* Appendix for further notes on the Bullionists and Mercantilists.

all part of the mercantilist policy, which in some respects still has its adherents.

One result of the continual inflow of gold and silver was that prices ever tended to increase; and a country whose prices are high is a good one to sell to and a bad one to buy from. Hence there was a danger to the export trade, and an encouragement to import goods; this was not in keeping with mercantilist principles.

With the Industrial Revolution, the need for foreign material and foodstuffs grew very urgent, and it became recognized that whatever service the mercantilist doctrine may have rendered in the past, it was fast becoming obsolete. The abandonment of this policy was signalled, among other things, by the gradual removal of most of the protective duties.

In 1846 the tax on imported corn was repealed, and was followed by the withdrawal of duties on raw materials and manufactured goods. By the end of the century, less than a score of commodities were liable to import duty, and then the tax was for revenue rather than for protection.

ARGUMENTS FOR PROTECTION OF HOME INDUSTRIES.

Though the number of arguments brought forward in support of Protection have been very numerous, they are nearly all covered by the following—

(i) *That Essential Industries need Protection.* In these are included such a vital industry as agriculture, which may be in danger of declining through the underselling of foreign competitors; also those industries supplying military and naval needs, such as the chemical and optical glass trades. Entire dependence on foreigners for these commodities might cause serious difficulty in time of war.

(ii) *That "Infant Industries" need Protection.* It is claimed that a new industry, if protected during its "infancy," will grow strong enough eventually to dispense with the need for protection.

(iii) *That there should be a great Diversity of Industries.* Under Free Trade, the Protectionist argues, a country may specialize on very few staple industries, the failure of which would involve the country in ruin. Where there is a great variety of industries, the danger is not so great.

(iv) *That Protection means High Wages.* It is argued that an industry which is not undercut by foreign rivals can pay its workers better wages.

(v) *That Protection is necessary to guard against "Dumping."* A firm abroad that enjoys monopoly or other advantage may charge comparatively high prices in its own country, but in order to secure the advantages of large-scale production, may have to produce more than is absorbed by the home market. The surplus may be "dumped" in other countries at prices lower than those in the firm's own country, and below the cost of production in those countries where the goods are "dumped."

(vi) *That Home Industries should be supported,* quite apart from the considerations already mentioned.

(vii) *That the foreigner may pay the duty.* It is recognized that this only applies in certain cases.[1]

Some Protectionists prefer, instead of, or in addition to, import duties, the granting of *bounties.* It is held that these are more direct and certain in their effects. Secondly, that they encourage exports (and therefore

[1] The problem of the incidence of customs duties is discussed in connection with the general principles of taxation in Chap. XX, § 3. Everything depends on the nature of the demand and supply, whether elastic or inelastic, possibility of substitute, etc.

imports) and so do not restrict international trade in the same way as protective import duties.

CRITICISM OF ABOVE PROTECTIONIST ARGUMENTS.

(i) Protection of particular industries might injure the rest of the community through higher prices for those industries' products. Also, it is sometimes difficult to decide whether one industry is more essential than another.

(ii) In the same way, it is not always simple to define what is an "infant industry." It has been remarked that a protected "infant industry" is unwilling ever to admit itself "grown up," lest the protection be removed.

(iii) It is not true that a country under Free Trade concentrates on very few industries. There is great variety for example among the industries of the United Kingdom, the most prominent of Free Trade nations. Even if the operation of the Law of Comparative Costs were entirely unfettered, it is doubtful whether a country would specialize in a very small number of industries.

(iv) Protection of an industry presumably means higher prices for its products. It is not the amount of the wage, but the purchasing value, that counts. Even if the workers in a protected industry were to receive a higher nominal wage, it does not necessarily follow that their real income would increase. In any case, the workers in non-protected industries would suffer through the higher prices.

(v) Where a foreign producer deliberately undersells in another country in order to crush competition, with the intention of raising the price when his rivals have been removed, it is admitted that steps should be taken

to prevent this practice. But the importance of this kind of " dumping " should not be exaggerated. Raising the price at a later stage will always revive competition, where it has been eliminated. Further, " dumping " is often temporary and spasmodic in nature, and where this is the case it is difficult to take counter-measures. Again, " dumping " has been compared with " spring sales," it being contended that the people in the country where the goods are sold cheaply are really getting bargains. This is only true, of course, where there is no insidious motive behind the low prices. *The Safeguarding of Industries Act*, 1921, was designed, whether wisely or not, to prevent the sale of certain foreign goods in this country at prices considered unfair to the home producer.

(vi) With regard to supporting home industries, the principle may be accepted, but it does not mean bolstering up an industry which cannot fairly face foreign competition. Protection of such an industry is akin to charity.

(vii) It is not true that the foreigner can be made to pay the duty (except in a few isolated instances).[1] And if he did pay the tax and sold his goods as before, there would not be much protection afforded to the industry. If he added the cost to the price, the consumer would suffer. It would seem, therefore, that if the home producer is to benefit, it must be at the expense, not of the foreigner, but of the home consumer.

ARGUMENTS FOR FREE TRADE.

(i) The chief argument used in favour of Free Trade is that the resources of a country are allowed to flow into those channels where they can be employed to the greatest economic benefit (i.e. into those industries that

[1] *See* previous footnote.

have the greatest relative advantage). This results in a larger national product and lower general prices, earning higher *real* wages than would be possible under Protection, which implies artificial direction of these resources.

(ii) As far as the United Kingdom is concerned, it would be unwise to impose tariffs on such raw materials and semi-manufactured goods as are used in home production. Similarly, taxes on foodstuffs to protect home producers might, for the reasons already mentioned, divert our means and efforts into less productive quarters.

(iii) It is contended by some Free Traders that Protection implies the violation of one's natural rights to buy where one pleases.

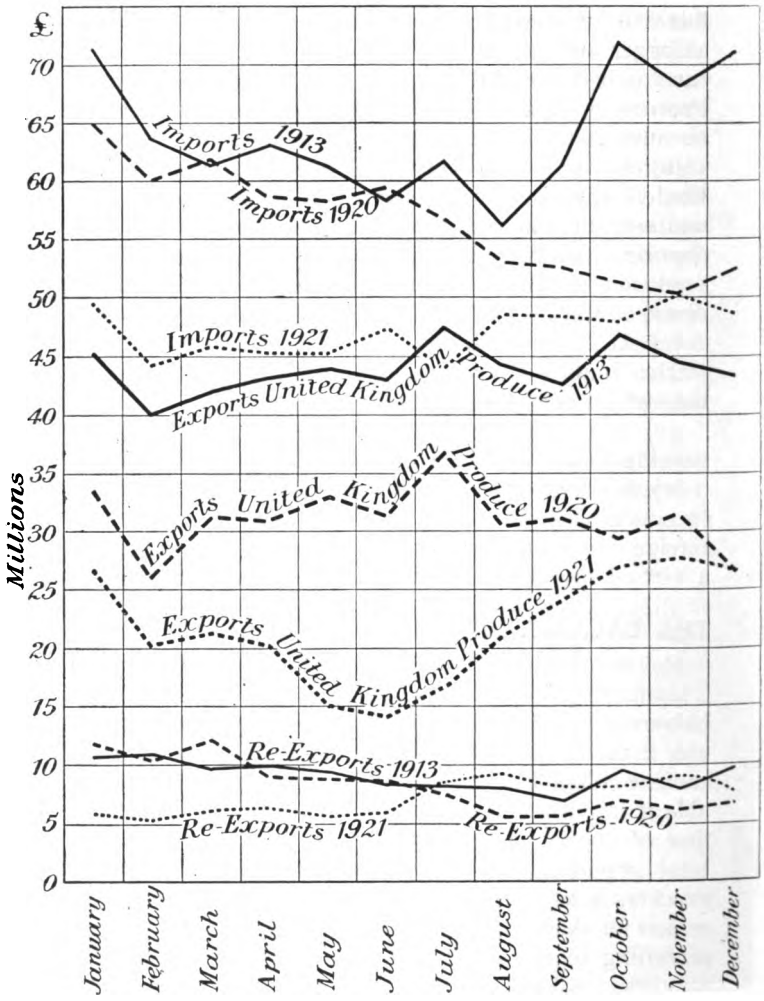
(iv) It is not necessary to resort to Protection to develop and maintain a national feeling and pride.

(v) A great objection to Protection is that it tends to create vested interests, and that the elimination of foreign competition may give such a group of industries a virtual monopoly inside the national boundaries.

THE BALANCE OF TRADE.

Relics of the Mercantilist period are the terms " favourable " and " unfavourable " as applied to the balance of trade. This used to be considered favourable if there was a surplus of exports over imports, thus causing an inflow of specie. It was considered unfavourable if imports exceeded exports, necessitating an outflow of specie. But it is obvious that over a period total imports can never be greater or less than total exports, unless gifts are taken into consideration. A reason for the apprehension held by some people is that, according to the published trade returns, the *recorded* imports are higher than the *recorded* exports: £100 worth of goods exported from Liverpool might be

IMPORTS AND EXPORTS OF THE UNITED KINGDOM
(Monthly Returns) 1913 ; 1920 ; 1921



REPRODUCED FROM "BOARD OF TRADE JOURNAL," BY KIND PERMISSION OF THE EDITOR

valued at £120 on reaching New York, meaning an "invisible" export from this country of £20 worth of shipping service. If the whole world's trade could be tabulated, it would be found that the recorded world imports are greater than the recorded world exports, the inconsistency being due, of course, to the *un*recorded services. The unrecorded or "*invisible*" *exports* of the United Kingdom are of great amount; the services rendered by British shipping, insurance, and financial companies being paid for in the form of material or "visible" imports. Similarly, a loan to a foreign country means an annual return of interest, again in the shape of material goods.

The *Board of Trade Journal* estimated that in 1920 the "invisible" exports were roughly as follows—

Shipping services	£340 millions
Banking and insurance services	40 ,,
Income from investment abroad, corresponding to an "invisible" export	120 ,,
	£500 millions
Against this was excess of "visible" imports over "visible" exports of	£335 millions
Leaving an excess of exports of all kinds over "visible" imports of	£165 millions

(Which sum apparently corresponds to "invisible" imports.)

CHAPTER XVII

THE FOREIGN EXCHANGES

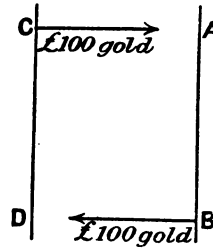
Section 1. *The Method of Foreign Exchange.*

THE IMPORTANCE OF CREDIT IN FOREIGN TRADE.

In the early days of foreign trade, exchange was effected either by direct barter or by payment in the precious metals. The former method was very clumsy, and suffered from the drawbacks common to all forms of barter. The latter, though an improvement, was still highly inconvenient and wasteful. The risk of loss, too, was a formidable factor. In the same way as credit largely supplanted cash payments in internal trade, it gradually became adopted in international transactions. To-day nearly the whole of foreign trade is effected through the credit system, whereby debits and credits are not only brought together and cancelled, but those **debits and credits near together are made to settle debts far apart.**

The following simple examples illustrate this point—

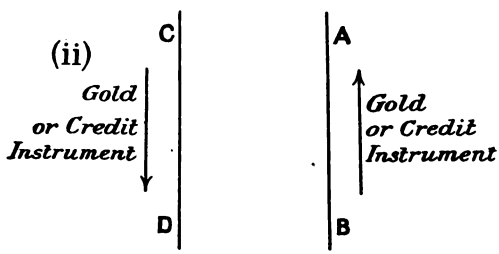
(i)



(i) Suppose B in the United Kingdom owes D in the United States £100, and that C in the United States owes A in the United Kingdom an equal sum. The debts *might* be settled by direct payment in gold, C to A and B to D. This method would be cumbersome, wasteful, and risky.

(ii) A stage further is reached if an arrangement can be made under which B pays A and C pays D. This might be done by B going to A, paying him a sum in return for the latter's claim on C; B then sends this claim in settlement of his own account to D, who finally presents A's claim and receives the money.

Even if this method involves the payment of gold, it is still superior to the other, in that the costs and risk of transport are reduced.



But if it is more advanced, and the debts are "cleared" through the credit system, the advantages and economies are obvious. Modern international trade makes full use of the system of credits and, as indicated in the previous pages, there is rarely need in ordinary times for bullion to be transferred.

THE BILL OF EXCHANGE.

In internal trade, the most important credit document is the cheque. Internationally it is the Bill of Exchange, which, as explained in Chapter XIV, § 1, is "an unconditional order in writing given by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay on demand, or at a fixed or determinable future time, a sum certain in money to, or to the order of, a specified person or to bearer."

The following is a simple form of Foreign Bill—

£1,000 *London,*

Stamp 10*s.* 15*th September*, 1922

Three months after sight pay this First of Exchange (second and third of even tenor and date unpaid) to *P.Q.* or order the sum of *One Thousand Pounds* for value received.

T. V. & Co.

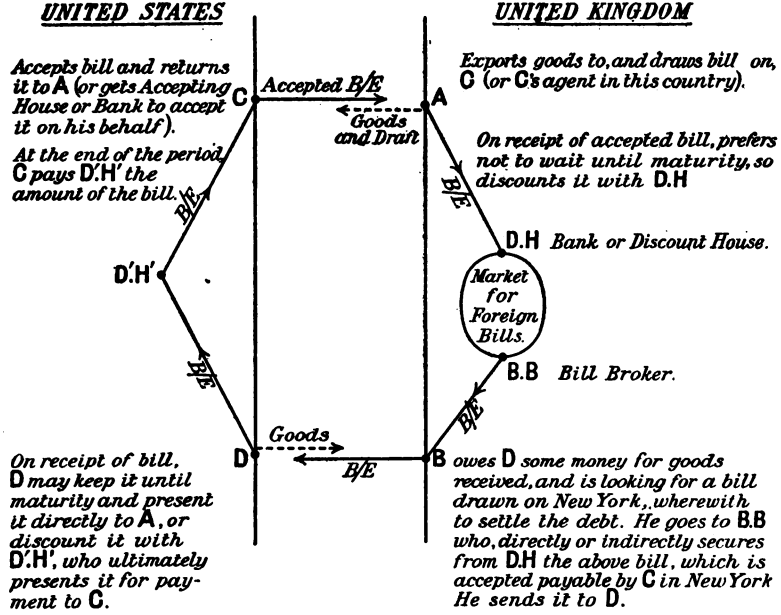
To *R. S.*
New York.

T. V. & Co. are the creditors in London who draw the bill on R. S. in New York, making it payable to P. Q. or order. The bill is accepted by R. S. signing his name across the face of it, or an accepting house doing it on his behalf.

(Three copies are usually made in the event of one or two getting lost. Hence the phrase "second and third of even tenor and date unpaid." The stamp duty varies with the amount of the bill. "After sight" in a foreign bill takes the place of "after date" in an inland bill because of the length of time taken up by the transfer of the bill.)

WORK OF A BILL OF EXCHANGE.

The work effected by a bill of exchange can best be illustrated by a further example. Again, suppose A in the United Kingdom is the creditor of C in the United States, and D in the United States is the creditor of B in the United Kingdom, for simplicity, say, for a similar amount. A single bill of exchange may clear the two debts, as is shown in the diagram on p. 251.


UNITED STATES
UNITED KINGDOM
Accepts bill and returns it to A (or gets Accepting House or Bank to accept it on his behalf).
At the end of the period, C pays D'.H' the amount of the bill.
C
Accepted B/E
A
Goods and Draft
Exports goods to, and draws bill on, C (or C's agent in this country).
On receipt of accepted bill, prefers not to wait until maturity, so discounts it with D.H
B/E
B/E
D.H Bank or Discount House.
D'.H'
Market for Foreign Bills.
B.B Bill Broker.
B/E
B/E
Goods
D
B/E
B
On receipt of bill, D may keep it until maturity and present it directly to A, or discount it with D'.H', who ultimately presents it for payment to C.
owes D some money for goods received, and is looking for a bill drawn on New York, wherewith to settle the debt. He goes to B.B who, directly or indirectly secures from D.H the above bill, which is accepted payable by C in New York He sends it to D.

" Spot " and " Forward " Dealings.

In practice, an interval usually elapses between the transfer of the goods and the settlement by cash or a negotiable bill. Where the exchanges are subject to serious fluctuations, one or other of the parties may suffer a loss before the transaction is completed. This is, indeed, one of the most important reasons for the recent breakdown of trade with certain countries.

To reduce this risk, dealings may be effected in the "*Forward*" market as distinct from the "*Spot*" market.

" Spot " transactions imply exchange of cash in one currency for cash in another. But the dealers may find it difficult to obtain cash immediately, yet delay may mean loss. If the machinery of the " Forward " market is employed, however, a contract for future payment is arranged, calculated on the basis of the " Spot " rate prevailing at the original date. A dealer is therefore protected against fluctuations in the exchange pending the conclusion of the contract.

Section 2. *The Rate of Exchange*

THE BASIS OF EXCHANGE.

The term " Foreign Exchanges " is applied to the machinery which makes possible the above transactions, and translates the units of one currency into those of another.

In the absence of a universal standard currency, some common measure of value has to be obtained. When the free market in gold existed, this metal served the purpose for most countries. At the present time the position is vague owing to the restrictions on gold movements and practical inconvertibility of many government notes in different parts of the world. In

order to understand the system, however, it is necessary, first, to consider normal conditions.

The Mint Par of Exchange indicates the equivalence between the coinages of different countries as determined by a comparison of their weights and fineness.

Thus the British sovereign = 7·98805 grammes of gold $\frac{11}{12}$ths fine
$\therefore$ = 7·32238 ,, ,, pure gold
The French Napoleon = 6·45161 ,, ,, gold $\frac{9}{10}$ths fine
(20 francs) $\therefore$ = 5·80645 ,, ,, pure gold

$$\text{Therefore a sovereign} = \frac{7{\cdot}32238 \times 20}{5{\cdot}80645} \text{ francs} = 25.2215 \text{ francs.}$$

The Mint par of exchange then between London and Paris is 25.2215 francs per £.

Where one of the countries has a *paper currency* and a nominal gold unit, the Mint par of exchange of that unit is calculated, and then converted into terms of paper money according to the ratio-value of gold to paper.

The same procedure is adopted where one of the countries has a silver currency and a nominal gold unit.

But where a country has a silver currency only (e.g. Hong-Kong) the rate of exchange is chiefly determined by the market value of silver in terms of gold.

VARIATIONS IN THE RATE OF EXCHANGE.

Debtors for sums in another country require bills of exchange payable in that country (or elsewhere if the acceptor is of universal standing, e.g. the London houses), while creditors for sums abroad have these bills for sale. In practice, banks and bill-brokers do most of the actual buying and selling. The price of the bill (i.e. the rate of exchange) depends upon conditions of demand and supply, which are governed by the volume of imports and exports.

A country which has been *importing more than exporting will have accepted payment of a greater value*

of bills than will be payable to her.[1] The supply of bills drawn on her will be relatively great, the demand for them relatively small. Hence the price of the bill will fall below the Mint par (i.e. the exchange will be at a discount).

On the other hand, a country which has been *exporting more than importing will be a creditor for a greater value of bills* than will be presented to her for payment. The supply of bills drawn on her will be relatively small, the demand for them relatively great. Hence the price of the bill will rise above the Mint par (i.e. the exchange will be at a premium).

During and since the war, London has been importing from New York more than she has been exporting in return. The position is, therefore, that in London there are many people wanting bills payable in New York, while comparatively few have them for sale. Consequently the price of a New York bill rises. Further, in New York there are many offering for sale bills payable in London, while comparatively few are wanting them. Consequently the price of a London bill falls. *Thus the rate of exchange is favourable to a creditor nation and adverse to a debtor nation.*

Where the imports have been balancing exports, and the supply of, and demand for, bills are equal, the price of a bill will *tend* to equal the Mint par, i.e. the exchange will be at par. (It may not actually equal the Mint par, owing to the cost of sending gold. The price of a bill will be so much above or below this level according to this cost. *See* " Gold Points " below.)

[1] Over a period, of course, imports and exports must balance. When in a short period a country imports more than she exports (reckoning " visible " and " invisible " or both), she is said to export " promises to pay " up to the difference, and provided that her credit is good, these documents are negotiable and convertible into cash.

Other Causes of Variations in Rates of Exchange.

(*a*) Fluctuations in the discount rate.[1]

(*b*) Credit of persons concerned.

(*c*) Condition of coinage and paper currency.

(*d*) Fluctuations in market ratio of gold and silver, affecting countries with gold and silver standards respectively.

(*e*) Foreign loans.[1]

(*f*) Investment and speculation.

Arbitrage Operations. These transactions have for their object the making of profit out of the differences between the exchange rates in two or more countries. They are of service in that they tend to average the rates throughout the world's exchanges and so make for general stability. On the other hand, deliberate manipulation of the exchanges may do incalculable harm.

LIMITS TO FLUCTUATIONS. GOLD POINTS.

A debtor only buys a bill of exchange for the purpose of settling a debt so long as it is cheaper than (or at least as cheap as) sending bullion. A creditor only accepts a bill of exchange in settlement of a debt so long as it is not more advantageous to have bullion remitted instead.

Specie or Gold Point is the term applied to that point above or below the par of exchange at which it is cheaper to import or export gold than a bill of exchange.

In normal times, when there is an almost universal free market for gold, there are definite limits to the rise or fall of the exchange rates above or below par. If the price of a bill to a debtor rises so much that it is cheaper for him to send gold, the maximum limit to the price of the bill is reached. If the value of a bill to a creditor falls so much that it pays him to import gold, the

[1] These are considered on p. 259.

minimum limit is reached. The former is termed the *export gold point*, the latter the *import gold point.*

From the point of view of the foreigner, our export point is his import point, our import point his export point.

Before the war, the cost of transmitting a sovereign to France (freight, insurance, etc.) was about 0·1 franc. The Mint par being 25.2215, francs per £, the sovereign would buy in Paris 25.2215 *less* 0.1 francs, i.e. 22.1215 francs. So long as a bill could be obtained at a rate which would yield more than that figure in Paris, gold would not be sent. But if it yielded less, gold export would be more advantageous. *Thus from our point of view* 25.1215 *francs would be the export point for gold.* Also, to import 25.2215 francs from Paris to London would cost 25.2215 *plus* 0.1 francs, i.e. 25.3215 francs. So long as a bill yielded more than that figure in London, gold would not be imported. But if it yielded less, then gold import would be more advantageous. *Thus* 25.3215 *francs would be the import point for gold.*

With respect to the New York rate of exchange before the war, the Mint par was 4.8665 dollars per £, the expenses being about 0.03 dollar. Therefore, from our point of view, the export point was 4.8365, the import point 4.8965.

Since the outbreak of war, however, the market for gold has been seriously restricted, thus interfering with the automatic application of the export or import point. Further, the costs of transmitting have so increased that, when the export of gold is generally permissible, these points will have to be re-adjusted; this will, until the costs fall again, widen the limits of fluctuations.

Automatic Correction of an Adverse Exchange.

In the long run, an adverse exchange rate tends automatically to correct itself. A country which has been importing in excess of her exports has the exchange

turned against her. Owing to bullion payments in settlement of the balance, the stock of gold, together with the credit based upon it, diminishes in the debtor country and increases in those countries to which the gold is remitted. In accordance with the Quantity Theory, prices tend to fall in the first country and to rise in the others. This may lead to an increase in the exports and a decrease in the imports of the country in question, until the exchange rate ultimately rights itself.

The above is the tendency in theory over a long period. In practice, it may be concealed or even offset by external and counteracting circumstances (e.g. reparations, indemnities, etc.).

EXCHANGE QUOTATIONS.

Until the end of 1920, dealers in foreign bills used to meet twice weekly at the Royal Exchange, and at the close of business issue a price list for bills termed the "London Course of Exchange." But improvements in communication, and particularly the use of the telephone, led to the abandonment of the "On 'Change" market in December, 1920. The reports now published in the daily papers are obtained from the leading Foreign Exchange operators.

The following is taken from *The Times*; it quotes the exchange rates prevailing on 28th and 29th July, 1922—

FOREIGN EXCHANGES

In the foreign exchange market interest mainly centred in the mark. The Berlin rate opened around 2,600 marks, and the nervousness which seems to have been created in Berlin by the latest French Note found reflection in a tendency to offer marks from all quarters. The rate rapidly rose, reaching 2,780m., or 235 marks above the previous high "record." Support was forthcoming at this level and a rally ensued, the quotation falling back to 2,665m., but rising again in the final dealings to its closing level of 2,700 marks. Both French and Belgian currencies were lower in value. Italian exchange displayed a

slightly firmer tone and closed at 96⅝lr. Renewed weakness was apparent in Austrian currency, the rate touching 165,000kr. and finishing at 161,500kr. The dollar exchange ruled steady. The following rates were current on Saturday—

Place.	Method of Quoting.	Par of Exchange.	29th July.	28th July.
New York	$ to £	4.86⅝	4.44⅝–4.45⅛	4.44¼–4.45⅜
Montreal	$ to £	4.86⅝	4.47–4.48	4.48–4.49¼
Paris	Fr. to £	25.22½	54.05–54.25	53.55–53.95
Brussels	Fr. to £	25.22½	57.15–57.30	56.55–57.00
Italy	Lire to £	25.22½	96½–97 5/16	96½–97¼
Berne	Fr. to £	25.22½	23.33–23.37	23.37–23.43
Athens	Dr. to £	25.22½	140–143	140–147
Helsingfors	M. to £	25.22½	213–216	211–216
Madrid	Pts. to £	25.22½	28.64–28.66	28.60–28.67
Lisbon	Escu.	53½d.	3⅜–3 15/16	3 13/16–3 15/16
Amsterdam	Fl. to £	12.107	11.48–11.50	11.46½–11.50
Berlin	M. to £	20.43	2,640–2,780	2,360–2,545
Vienna	Kr. to £	24.02	155,000–165,000	145,000-155,000
Budapest	Kr. to £	24.02	6,900–7,100	6,500–6,700
Prague	Kr. to £	24.02	193–196	192–197
Warsaw	M. to £	20.43	25,500–27,500	25,000–27,500
Bukarest	Lei to £	25.22½	685–700	680–710
Constantinople	Pst. to £	110	710–730	710–730
Belgrade	Din. to £	25.22½	350–360	350–360
Sofia	Lev. to £	25.22½	690–740	675–725
Christiania	Kr. to £	18.159	25.90–25.95	26.00–26.40
Stockholm	Kr. to £	18.159	17.00–17.04	17.01–17.10
Copenhagen	Kr. to £	18.159	20.68–20.72	20.65–20.75
Alexandria	Pst. to £	97½	97 5/16	97 5/16
Bombay	Per rup.	24d.	1/3 31/32–1/3 1/16	1/3 31/32–1/3 1/16
Calcutta	Per rup.	24d.	1/3 31/32–1/3 1/16	1/3 31/32–1/3 1/16
Madras	Per rup.	24d.	1/3 31/32–1/3 1/16	1/3 31/32–1/3 1/16
Hong-Kong	Per dol.	—	2/7–2/7 9/16	2/7–2/7 9/16
Yokohama	Per yen	24.58d.	2/1 3/32–2/1 3/16	2/1 3/32–2/1 3/16
Shanghai	Per tael	—	3/5½–3/6½	3/5½–3/6½
Singapore	Per dol.	—	2/3 31/32–2/4	2/3 31/32–2/4
Manila	Per dol.	24.066d.	2/2½	2/2½
Rio de Jan.	Per mil.	27d.	7½	7 15/32
B. Aires, T.T.	Per dol.	47.58d.	44 7/32–45	44 7/32–44 7/16
Valparaiso, 90 days	$ to £	$13½	32.60	33.30
Montevid., T.T.	Per dol.	51d.	44–44½	44–44½
Lima	Eng.to Peru £	Par.	8% prem.	8% prem.
Mexico	Per dol.	24.58d.	25–28	25–28

Notes on the Table.

(*a*) Countries having a gold standard are quoted in terms of their units to the £.

Silver standard countries are quoted in terms of English money to the foreign unit.

(*b*) The two quotations for each country mean the selling and buying prices. When the exchanges are expressed in

foreign currency, the *higher* is the rate at which a dealer will buy, the *lower* at which he will sell. The higher rate means, of course, a bigger number of foreign units to the £, and therefore a lower price per unit.

The meaning of the well-known Exchange maxims should now be evident—

"*High rates are for us, low rates are against us.*"
Therefore, "*Buy high, sell low.*"

THE BANK RATE AND THE EXCHANGES.

A movement of the exchanges against this country means that the export gold point is being approached if not yet passed. To prevent undue depletion of the gold reserve, the Bank Rate may be raised. For reasons examined in Chapter XV, § 1, the outflow of gold is checked and the inflow is encouraged. If the discount rate is higher in London than (say) New York, Americans will wish to transfer money to London, where it commands a higher price. This is done by purchasing British bills, which are equivalent to so much money in London. Also, the London branches or agents of American houses may draw bills on New York and sell them in London. The result of an increased demand for London bills and increased supply of American bills is a rise in the price of the London bill and a fall in that of the New York bill (i.e. an improvement in the British exchange).

Raising the Bank Rate in recent years has not had the usual effect, partly because the export of gold was forbidden by most countries, partly because there is a great demand for money elsewhere for reconstruction and other purposes.

EFFECTS OF FOREIGN LOANS ON THE EXCHANGES.

When one country raises a loan in another, it may take the proceeds directly in money, or it may use the funds to purchase goods in the lending country. A loan

taken in goods has not so marked an effect upon the exchanges as one taken in money.

The *immediate effect* of a loan is to reduce the demand for bills on the lending country, and so make her exchange rates less favourable, while improving the rates of the borrowing country. (This was done during the war when the Allies contracted large loans in New York, partly to remedy the exchange.)

The *ultimate effect* is just the opposite. The interest paid to the lending country means a demand for her bills, tending to improve her exchange. Again, to consider more fundamental reasons, there will be less money available in the lending country and more in the borrowing country (unless the loan has been taken altogether in goods). Therefore prices will tend to fall in the lending country and rise in the borrowing country. This means an increase in the exports and a reduction in the imports of the former country, and *vice versa* for the latter. A country with relatively high exports to imports usually has a favourable exchange. One with relatively low exports to imports tends to have an adverse exchange.

CURRENCY, PRICES, AND THE EXCHANGES.

It was observed in Chapter XIII that debasement of the coinage or over-issue of notes caused a rise in the general level of prices. Higher prices bring about a fall in exports and an increase in imports, which eventually turn the exchanges against the country in question.

Since a par of exchange between different countries implies equivalence between their standard currencies, debasement or abuse of one of them must necessarily be followed by a fall in the rate of exchange, unless the other currencies have been debased to the same extent.

It is instructive to note the expansion of money

supplies in different countries, the corresponding rises in the respective price levels, and the similar effect upon the rates of exchange.

The following table is based on official statistics,[1] and shows, for some of the principal countries, the approximate equivalence between the proportion of the wholesale price level of May, 1920, to that of 1913 on the one hand, and the proportion of the rate of exchange in 1920 to that of 1913 on the other. For purposes of comparison, the proportion which the United States price level for May, 1920, bore to that of 1913 is reckoned as 100. Similarly, in the second column, the figures indicate the proportion of foreign money that American money bought in 1920 compared with that in 1913—

Country.	Price Level.	Exchange.
United States . . .	100	100
United Kingdom . .	112·5	124
France.	203	247
Italy	242	325
Germany.	572	903
Sweden	133	125
Norway	147	146
Netherlands	95	110
Canada	97	112
Japan	100	97

Though the figures may be subject to certain criticism (e.g. the arbitrariness of index numbers), they would seem to indicate a general correspondence between the price level and the exchange.

[1] Brussels Conference Memorandum and Supreme Council Bulletin, quoted in *Money*, by D. H. Robertson. Space does not allow one to consider here the relation between "Purchasing Power Parity" and the exchanges. For clear treatment of this subject, reference should be made to the writings of Prof. Cassel and Prof. Pigou in the *Economic Journal*; also to an article by Mr. J. M. Keynes in *Reconstruction in Europe*, Sec. 1, "*Manchester Guardian Commercial.*"

CHAPTER XVIII

SOME WAR AND POST-WAR MEASURES

THE WAR AND THE MONEY MARKET.

PRIOR to the outbreak of war early in August, 1914, business was good and a trade boom was expected. The total bank deposits amounted to £1,150 millions. The supply of money was plentiful and the discount rate low. When it appeared that war was likely, a serious drain on the Reserve commenced.

There was a three days' run on the Bank. It was the eve of the holidays and, in any case, there would have been a certain drain of gold, but this demand was considerably accentuated by pressure from other quarters. An unusual number of bank notes were presented for payment, while the joint-stock banks also required gold to pay their customers. The action of these banks in refusing at one time to pay out gold has been strongly criticized on the ground that it unduly frightened the public and might have led to serious panic. In addition, there was a big demand for gold from abroad. Though the normal gold reserve had averaged about 35 to 45 millions, it had been unusually depleted in July, 1914 by heavy Continental demands, which had reduced it to 27 millions. The rate of discount was increased, but this alone would probably not have been sufficient to prevent further depletion.

Position of the Money Market in August, 1914. Before examining the emergency measures that were taken to cope with the situation, it is necessary to consider the nature of the main problems that had to be faced.

(i) ***The London banks and accepting houses had accepted***

bills on behalf of enemy clients, and, reckoning on due payment of these bills, had undertaken further obligations. This means that while their incoming resources had been cut off, claims for outgoing amounts were daily falling due. Some measure was necessary to meet this difficulty, for failure of these banks and financial houses would have precipitated a panic.

(ii) In addition, there were *large amounts owing by enemy firms to British creditors*, who were in danger of insolvency unless some help was given.

(iii) *Holders of securities began to sell on the Stock Exchange*, fearing that their stocks would depreciate in value. This only emphasized the depreciation, which not only adversely affected the ordinary stockholder, but also embarrassed the banks which had accepted securities against loans.

EMERGENCY MEASURES ON THE OUTBREAK OF WAR.

(i) **Rise in the Bank Rate.** On the 30th July, the Bank Rate was raised from 3 to 4 per cent, on the 31st to 8 per cent, and on the 1st August was further increased to 10 per cent. Apparently this extra precaution was deemed unnecessary later in the week, for the rate was reduced on the 6th August to 6 per cent.

(ii) **Extension of the Bank Holiday.** Fortunately, the outbreak of war coincided with the Bank Holiday, which was extended for three days more, in order to provide time for making arrangements.

(iii) **Suspension of the Bank Charter Act.** Though the Act of 1844 had been suspended, thus giving the Bank the power to increase its fiduciary note issue, no advantage of the concession was taken owing to the

(iv) **Issue of Treasury Notes.** Currency notes of £1 and 10s. were issued as legal tender, thus preventing

further depletion of the gold reserve. These notes were loaned to the banks up to one-fifth of their deposits, at an interest of 5 per cent per annum; thus it was not at first a *free* currency. The banks found it unnecessary, however, to draw up to the maximum amount, showing that the demand for cash was not as extensive as had been contemplated.

(v) **Closing of the Stock Exchange.** The Stock Exchange was closed on 31st July, partly because many stock exchanges abroad had been closed and foreigners were attempting to sell their stocks in London (meaning in effect a drain on the gold reserve), and partly to prevent heavy sales of securities which would only have brought their price still lower.

(vi) **Moratorium.** Debtors for amounts over £5 were allowed to defer payment at first for a month, later extended to three months.

(vii) **Guarantee of Bills of Exchange.** On 13th August the Bank of England was authorized by the Government under guarantee to discount approved pre-moratorium bills (enemy or not) " without recourse to the last holder." The acceptors of such bills were granted the opportunity of postponing payment on paying an interest of 2 per cent over the Bank Rate.

(viii) **Stock Exchange Loans.** Dealers were granted loans by the banks to enable them to tide over the difficult period.

(ix) **Advances to Exporters.** Relief was given by the Foreign Debts Committee to traders, who had money owing from abroad, up to 50 per cent of the sum outstanding.

All these measures helped to " liquefy " the credit resources that had been " frozen " on the outbreak of war.

THE EXCHANGES DURING AND SINCE THE WAR.

(i) **The Neutral and American Exchanges Moved Against the United Kingdom,** owing to—

(*a*) Diminution in our exports of goods, and also in the " invisible " exports.

(*b*) Increase in our imports of food and war materials, (*a*) and (*b*) resulting in an adverse balance of trade.

(*c*) British loans to Allies and Dominions, having for a time an adverse effect on the rate of exchange. (*See* pp. 259–260.)

(*d*) Restriction of the gold market, and the veto on gold exports.

(*e*) Virtual inconvertibility of Treasury notes.

(*f*) Diminution in the reserves.

(*g*) General effects of the war on the credit of a country engaged.

(The Allied Exchanges moved in our favour, for the relation of Britain to the Allies was similar to that of America to us.)

(ii) **Attempts to Correct the American Exchange.**

(*a*) *Export of Gold.* Though large amounts were sent, the value was quite inadequate.

(*b*) *Establishments of long credits,* against which goods were exported to Europe.

(*c*) *Loans were floated in the United States,* the effect being for a time to improve the Allied exchanges.

(*d*) *Purchase of American Securities.* The Treasury acting first through the Bank of England and, later, through the *Dollar Securities Committee,* asked the holders of American securities to sell them to, or deposit them with, the State, which had the power to sell these securities as occasion required. People who deposited the securities received interest for the period

of the loan, and, in the event of these being sold by the Government, were re-imbursed by the offer of stock of similar value.

The following figures are significant—

American Securities purchased by Bank of England in 1915	=	£46,600,396
American Securities purchased by Committee	=	170,044,000
Total purchased . . .	=	£216,644,396
American Securities on deposit, 31st Mar., 1919	=	405,951,189
American Securities on deposit sold to Treasury	=	24,360,000
American Securities specially deposited by Canadian Pacific Railway	=	8,000,000
Grand Total	=	£654,955,585

STABILIZING THE EXCHANGES.

Various proposals for stabilizing the exchanges have been made, but Mr. J. M. Keynes's plan[1] appears to be the most practicable and economical. The following are very brief extracts—

(*a*) Existing currencies should be made convertible into gold, promptly but at a cautious valuation. . . .

(*b*) The State banks of Europe would be well advised to make a difference of 5 per cent between their buying and selling prices of gold. . . .

(*c*) The State banks of Europe must make up their minds that their gold reserves are intended for use in case of need, and are not merely ornamental—in fact, that the governors of these institutions are bankers and not Maharajahs; and they must even give guarantees that this is their policy. For before the war a ridiculous convention was growing up that a note-issuing bank cannot afford to part with more than a trifle of its reserves. . . .

(*d*) The central bank of each of the participating countries should give an unconditional guarantee for five years that they will redeem their notes in gold. . . .

(*e*) To assist those participating countries of which the existing gold reserves are relatively weak . . . for a period of five years

[1] *Reconstruction in Europe*, Section 1 (20th April, 1922), published by "*Manchester Guardian Commercial.*"

the Federal Reserve Board of the United States might agree to make temporary loans of gold . . . at a rate of 10 per cent per annum (such interest to be paid into a guarantee fund) to any of the participating central banks which require it, up to 15 per cent of the standard note circulation of each, subject to a maximum of $150,000,000 for any one country, and an aggregate of $500,000,000 at any one time ; all the participating central banks to guarantee the Federal Reserve Board against ultimate loss. . . ."

REPORT OF COMMITTEE ON CURRENCY AND FOREIGN EXCHANGES AFTER THE WAR (Cd. 9182).

In 1918, the Treasury and the Ministry of Reconstruction appointed a representative Committee to consider the position of the currency and foreign exchanges, and report upon the steps required to bring about the restoration of normal conditions. The following is a summary of the principal recommendations—

(i) The gold standard should be restored without delay. The pre-requisites of this restoration are—

(*a*) The cessation of Government borrowings as soon as possible.

(*b*) That the recognized machinery, namely, the raising and making effective by the Bank of England discount rate, which before the war operated to check a foreign drain of gold and the speculative expansion of credit in this country, must be kept in working order.

(*c*) That the issue of fiduciary notes should once more be limited by law.

(ii) Respecting the control of the note issue, the following observations were made—

(*a*) While the obligation to pay both Bank of England notes and currency notes in gold on demand should be maintained, it is not necessary or desirable that there should be any early resumption of the internal circulation of gold.

(*b*) While the import of gold should be free from all restrictions, it is convenient that the Bank of England should have cognizance of all gold exports.

(*c*) All the gold reserves of the country should be centralized in the Bank of England.

(iii) The principle of the Bank Charter Act, 1844, should be maintained, viz., a fixed fiduciary issue, beyond which notes should only be issued in exchange for gold.

(iv) The maximum fiduciary issue of currency notes in one year should be the legal maximum issuable in the following year. [*This has been effected; see* Chapter XIII, § 2.] Provision should eventually be made for the transfer of these notes to the Bank of England.

(v) When the fiduciary portion of the issue has been reduced to an amount which experience shows to be consistent with the maintenance of a central gold reserve of £150 millions, the outstanding Currency Notes should be retired and be replaced by Bank of England notes of low denomination. [*Following this recommendation, there has been a big increase in the gold reserve. At the half-year ending 28th June,* 1922, *it was over* 127 *millions.*]

GOVERNMENT EXPORT CREDIT SCHEME.

The Overseas Trade (Credits and Insurance) Act, 1920, aimed at re-establishing trade between the United Kingdom and the smaller Continental nations.[1]

According to the Act, the Board of Trade, with the consent of the Treasury, could—

(*a*) Grant to persons or companies in the United

[1] Finland, Latvia, Esthonia, Lithuania, Poland, Czecho-Slovakia, Serb-Croat-Slovene State, Rumania, Georgia, and Armenia. Later extended to Bulgaria, Austria, Italy, and Portugal.

Kingdom credits to facilitate the export to these countries of goods partly or wholly made in the United Kingdom. (Raw materials and surplus Government stock excluded.)

(*b*) Undertake the necessary insurance.

The foreign buyer was to deposit securities to the appropriate value; perhaps this stipulation was partly responsible for the scheme's lack of marked success. Wider in its scope is the "ter Meulen" plan, which, if put into operation, is more likely to be effective.

THE "TER MEULEN" SCHEME FOR INTERNATIONAL CREDITS.

[Approved of by the Council of the League of Nations.]

The following is a summary of the "ter Meulen" scheme taken from the official publication—

The "ter Meulen" scheme is an attempt to overcome one of the main obstacles to revival of normal business, namely, the difficulties of traders in certain countries in obtaining short and long term credits to finance necessary imports.

The essence of the scheme is that trade shall be encouraged by providing a special form of security to reinforce the credit of importers. That this special form of security shall take the form of Government bonds to be loaned by each Government to its own nationals. That the intrinsic value of the bonds should be fixed in such a manner as to inspire confidence in the lenders, by the fact that bonds can only be issued for an amount justified by the gold value of the underlying security, which value must be checked by an international commission of experts selected by, and receiving authority from, the League of Nations. Further, that these bonds should be made attractive to lenders by the fact that bonds issued to secure any particular

credit should be made out in whatever currency the lender may require (usually, of course, this would be the currency of the lender's own country).

It proceeds on the following assumptions—

(*a*) That credits for both short and long periods with the minimum risk to the lender are universally desired.

(*b*) That every State, however difficult its present financial position, possesses certain revenue-producing assets to which a gold value can be assigned, and on the security of which a bond issue can be made.

(*c*) That if the gold value were assessed, and the service of the bonds watched, by an independent expert committee, acting as trustees for the bond-holders, the bonds would be recognized as valuable securities, and traders in any country would be prepared to grant credits to a trader in the bond-issuing country, if he could put up these bonds as collateral security.

(*d*) That without such collateral securities, the necessary credits will not be given.[1]

[1] The full scheme is published in pamphlet form by Messrs. Harrison & Sons at 6d.

PART V

PUBLIC FINANCE AND POLICY

CHAPTER XIX

PUBLIC REVENUE AND EXPENDITURE

FUNCTIONS OF THE STATE.

THE question of the State's position in relation to the individual involves political considerations that are beyond the scope of this book. In the subsequent pages, attention can only be given (and then very briefly) to the State's financial activities that directly affect the economic organization.

Though important distinctions can be drawn in political theory between the State and the Government, for practical purposes State income and expenditure may be taken as referring to the share of the national product that is devoted to public purposes. In modern times, in practically all important nations, the State has come to be regarded as a most potent factor in economic affairs.

The chief governmental functions are (*a*) Protective, (*b*) Social, (*c*) Developmental, and (*d*) Economic, though these necessarily overlap to a certain extent. In considering these functions, attention must also be paid to **local authorities** whose economic activities are gradually extending.

PUBLIC BODIES IN RELATION TO INDUSTRY AND COMMERCE.

The relation of the Government and local authorities to industry and commerce is subject to much difference

of opinion. Public interference in economic enterprise may be classified as follows—

(i) **Public Facilities.** These would include such State and municipal functions as the provision of a good currency, fairs, markets and exhibitions, etc.

(ii) **Public Encouragement.** In some ways similar to (i), this goes further and covers encouragement to specific industries by means of protective duties, bounties, and other means.

(iii) **Public Regulation and Control.** A stage further is reached when the State or local body sets out to regulate and control an industrial or commercial undertaking. Such intervention may range from a simple regulatory action, without any actual participation, to a direct control of practice and policy. The ownership of the undertaking is still in private hands, but the direction rests more or less with the public body. As instances of such a position may be quoted gas companies and other public utility services which are given monopoly rights on condition that the local authority has certain powers in matters of charges, policy, etc.

(iv) **Public Ownership.** The final stage is reached when the public authority, not content with mere powers of regulation and control, assumes the ownership of the enterprise.

Apart from such " non-economic " public undertakings as the manufacture of armaments, etc., Government or local intervention may come about—

(*a*) When for reasons of economy and efficiency a social monopoly is indispensable (e.g. gas and water supplies, postal service, etc.).

(*b*) Where private enterprise fails in supplying an essential service or commodity (e.g. afforestation, bridges, etc.).

(*c*) Where private enterprise supplies a commodity or service of inferior quality.

(*d*) Where the supply is in the hands of a monopolist concern which is taking unfair advantage of its position.

THE STATE IN RELATION TO SOCIAL CONDITIONS.

A feature of most States in recent years has been the increased interest and participation in social matters. It is unnecessary to detail a complete list of public activities in this respect; chief among them in this country are: factory Acts, public health Acts, legislation for minimum wages, provision of machinery for industrial peace, health and unemployment insurance schemes, old-age pensions, public aid and relief, etc.

Another way of regarding public intervention is from the points of view of consumption, production, distribution, and organization.

(*a*) **Consumption.** The consumer is benefited by such measures as the food and drug Acts, public control or ownership of social monopoly services, etc.

(*b*) **Production.** Such legislation as the factory Acts might be considered as being in the interests of the community as producers.

(*c*) **Distribution.** The State has intervened in the distribution of the social product by imposing minimum rates of wages in certain industries. (Chapter VIII, § 1.)

(*d*) **Organization.** Instances of State intervention in industrial organization are the provision of employment exchanges and the machinery for conciliation and arbitration.

MAGNITUDE OF STATE EXPENDITURE.

Britain's population trebled between 1685 and 1841, but her public expenditure increased forty times. The sum was 47 millions in 1833; by 1893 it had more than doubled; it doubled again in the twenty years ending 1913.

The figures for the ten years ended 31st March, 1922, and the estimates for 1922–23 are as follows—

Financial Year.	Revenue.	Expenditure.
	£	£
1912–13	188,802,000	188,622,000
1913–14	198,243,000	197,493,000
1914–15	226,694,000	1,132,654,000
1915–16	336,767,000	1,559,706,000
1916–17	573,428,000	2,198,113,000
1917–18	707,235,000	2,696,221,000
1918–19	889,021,000	2,579,301,000
1919–20	1,339,571,000	1,665,773,000
1920–21	1,425,985,000	1,195,428,000
1921–22	1,124,880,000	1,160,521,000
1922–23 (Estimated)	*910,775,000*	*910,069,000*

Classification of Public Expenditure.

State expenditure generally comes under the following headings—

(i) *The Cost of Defence* (i.e. external security). Such is the cost of the Army, Navy and Air Force. In spite of recent curtailment of this class of expenditure, the proportion to the total is very high.

(ii) *The Cost of Justice* (i.e. internal security). This covers the expenses of the judiciary system, police and prisons.

(iii) *The Cost of Relief and Maintenance.* This item includes not only the ordinary poor relief, but the

sums spent on old-age pensions, national health and unemployment schemes, etc.

(iv) *The Cost of Education.* Expenditure on education is becoming recognized as being not only socially necessary, but economically imperative. Money spent on education is a productive investment. The expenditure on museums and art galleries, investigation and research, etc., would come within the same class.

(v) *The Cost of Government and Administration.* This inevitably increases as the scope of State activity widens. It includes the cost of the Legislature, Civil Service, etc.

(vi) *The Cost of Public Services and Works.* Among such expenditure is that on roads, bridges, harbours; the postal services (which are expected to be self-sustaining); the maintenance of the currency; and the system of weights and measures.

(vii) *The Cost to the State in Grants to Local Authorities.* To a certain extent, these grants are employed for purposes that are covered by the above.

(viii) *The Cost of the National Debt.* Following the war, this item is bigger than any other. Out of a total expenditure, about £1,161,000,000 in 1921–22, the British Exchequer paid out £345,000,000 in respect of National Debt Services.[1]

CLASSIFICATION OF PUBLIC REVENUE.

The revenue of the State may be considered according to whether it is in the nature of a loan, or a non-repayable contribution such as a tax. In normal times, when expenditure can be met out of the ordinary revenue, recourse to loaning is not so formidable as during and immediately following a war.

[1] *See* pp. 308–309.

Apart from loans the public revenue may be classified thus—

(i) Revenue from State ownership:

(*a*) Of land and buildings (British Crown lands yielded less than a million in the financial year 1921–22);

(*b*) Of industries and services.

(ii) Revenue from taxation.

(iii) Revenue from miscellaneous sources, casual and irregular in nature, such as fines, gifts, etc.

The various sources of income can be distinguished in the estimates shown opposite.

LOCAL EXPENDITURE AND REVENUE.

For 1921–22, the estimated expenditure of local authorities in Great Britain was £192,008,000, between one-fifth and one-sixth of the expenditure of the central Government. The total was spent on the following services—

	England and Wales.	Scotland.
	£	£
On Relief of the Poor . .	35,700,000	3,629,000
,, Education.	35,600,000	4,697,000
,, Police	10,200,000	1,141,000
,, Other services . . .	91,500,000	9,541,000
	£173,000,000	£19,008,000

The figures relating to the total amount raised in rates in 1921–22 are not yet available, but the proportion to the amount spent is probably very similar to that of 1917–18. In that financial year, the total local expenditure for Great Britain was £190,000,000. Of this

NATIONAL BALANCE SHEET ESTIMATES, 1922-23

ESTIMATED REVENUE.

	£
Customs	112,250,000
Excise	160,750,000
Total Customs and Excise	273,000,000
Motor Vehicle Duties	10,600,000
Estate, etc., Duties	48,000,000
Stamps	18,250,000
Land Tax, House Duty, and Mineral Rights Duty	3,000,000
Income Tax (including Super Tax)	329,000,000
Excess Profits Duty, etc.	27,800,000
Corporation Profits Tax	19,750,000
Total Inland Revenue	445,800,000
TOTAL RECEIPTS FROM TAXES	£729,400,000
Postal Service	35,667,000
Telegraph Service	5,230,000
Telephone Service	13,728,000
Total Post Office	54,625,000
Crown Lands	750,000
Interest on Sundry Loans (Including Suez Canal dividends)	14,000,000
Miscellaneous—	
Ordinary Receipts[1]	22,000,000
Special Receipts[2]	90,000,000
TOTAL RECEIPTS FROM NON-TAX REVENUE	£181,375,000
Total Revenue	£910,775,000
Borrowings to meet Expenditure chargeable against Capital	£10,050,000

ESTIMATED EXPENDITURE.

CONSOLIDATED FUND SERVICES.[3]	£
National Debt Services	335,000,000
Payments for Northern Ireland Residuary Share, etc.	2,500,000
Road Fund	10,000,000
Payments to Local Taxation Accounts, etc.	9,788,000
Land Settlement	3,500,000
Other Consolidated Fund Services	2,650,000
TOTAL CONSOLIDATED FUND SERVICES	£363,438,000
SUPPLY SERVICES.[4]	
Army	62,300,000
Navy	64,884,000
Air Force	10,895,000
Civil Services	317,455,000
Customs and Excise, and Inland Revenue Departments	12,275,000
Post Office Services	53,822,000
Provision for Supplementary Estimates	25,000,000
TOTAL SUPPLY SERVICES	£546,631,000
TOTAL EXPENDITURE	910,069,000
Surplus	706,000
Total	£910,775,000
Expenditure chargeable against Capital	£10,050,000

Notes on Balance Sheet.

[1] *Ordinary Receipts* include excess of receipts over expenditure in the working of the Mint, etc.

[2] *Special Receipts* from the realization and liquidation of war assets and liabilities.

[3] *Consolidated Fund Services* fixed permanently by Special Acts of Parliament.

[4] *Supply Services* debated and voted annually when the House of Commons goes into Committee of Supply.

amount about three-eighths was raised by local taxation, a large amount of the remainder being contributed from the National Exchequer.

LOCAL TAXATION, 1917–18

Authority.	*Rates Received.*
	£
Corporation of London	536,182
Metropolitan Boroughs.	3,733,014
London County Council	7,129,657
Boards of Guardians	14,603,258
Overseers	537,513
Metropolitan Police	1,975,283
County Councils	11,715,035
Town Councils	24,212,337
Urban Districts	7,016,028
Rural Districts	3,191,193
Burial Boards	161,338
Parish Councils	64,485
Lighting Inspectors	288,475
Commissioners of Sewers	212,900
	£75,376,698

CHAPTER XX

TAXATION

Section 1. *The Canons of Taxation*

THE NATURE OF TAXATION.

A TAX has been defined as *a compulsory contribution to the Government not in payment for any specific service rendered.*

In the earliest days of taxation, there was a certain connection between the contribution made and the benefit derived. A man might commute his manorial or other dues for a definite payment to his overlord, while a lord might commute his obligations to supply military aid to the king by paying an equivalent sum of money. But these were not taxes in the modern sense. If the benefit or *quid pro quo* theory were generally applied to-day, it would mean that those who derived most service from the State would have to pay most in taxation, obviously impossible, not to mention the injustice. This theory is no longer maintained as applying to national finance, but a trace of it still lingers in local taxation, where, on account of the smaller number of people, it is more possible to connect payment made and value received.

Apart from the conception of a tax as payment for direct benefit, the following views on taxation may be observed—

(i) **The "Financial" View.** The tax is sometimes regarded simply as a means of enabling the State to carry on; the exponents of this view are not concerned with the equity or inequity of the distribution of the

social product, but, from a purely " balance-sheet " standpoint, aim at devising means to obtain the necessary revenue as expediently as possible. Allied with the financial is the " cynical " view adopted by those who attempt to secure the needed revenue in such a way as to encounter the minimum vexation and active opposition. The supporters of this method maintain that any tax is good which yields a large income with comparatively little protest. The policy of " plucking the goose with as little squealing as possible " may not be advocated in as many words, but is doubtless responsible for much financial policy and legislation. It is in effect the principle of following the line of least resistance, which is always a temptation for the finance minister.

(ii) **The Social View.** The tax is considered by some as a social as well as a mere financial instrument, and is viewed as a means of reducing the inequality of the distribution. While the " financial " advocates would levy in such a way as to leave the people in the same relative position to each other as before the tax was imposed, many social reformers would employ the tax to reduce the gap between high and low incomes.

(iii) **The Sumptuary View.** Here the tax is regarded as a means of regulating consumption, to restrict expenditure on luxuries or noxious articles. While there may be a sumptuary element in a few taxes, the finance minister does not despise the revenue derived, which may be of such dimensions as to cast doubt on the sumptuary measure achieved.

ADAM SMITH'S CANONS OF TAXATION.

The four well-known canons laid down by Adam Smith are still of first importance—

(i) " The subjects of every State ought to contribute

towards the support of the Government, as nearly as possible in proportion to their respective abilities; that is in proportion to the revenue which they respectively enjoy under the protection of the State. . . .

(ii) " The tax which each individual is bound to pay ought to be certain, and not arbitrary. The time of payment, the manner of payment, the quantity to be paid, ought all to be clear and plain. . . .

(iii) " Every tax ought to be levied at the time, or in the manner, in which it is most likely to be convenient for the contributor to pay it. . . .

(iv) " Every tax ought to be so contrived as both to take out and to keep out of the pockets of the people as little as possible over and above what it brings into the public treasury of the State." (*Wealth of Nations*, Book V, Chapter II, Part II.)

These maxims, which are usually summarized under the headings of *Equality* (i.e. of sacrifice), *Certainty*, *Convenience*, and *Economy*, may be examined in more detail.

EQUITY AND PROGRESSIVE TAXATION.

Justice in taxation is a phrase which bears of more than one interpretation. It may mean, on the one hand, levying upon the people in proportion to their individual ability to pay; on the other hand, it may be taken to imply a scheme of taxation intended to modify the distribution of income. But, however the subject is viewed, one method of securing equity is that of a *progressive* levy. It follows from the law of diminishing utility that *a proportionate* impost causes more sacrifice to a poor than to a rich man. (*See* Chapter V, § 2.) This defect is remedied by a progressive rate (i.e. one which increases in percentage as the income increases). Progressive rates are more

possible in direct than in indirect taxation, this being one of the drawbacks of the latter method of raising revenue.

Taxation is termed *degressive* when the higher incomes, though they may be taxed at higher rates, bear less than an equal sacrifice. Taxation is said to be *regressive* when the percentage of the tax actually falls as the income increases. While regression is, as a general rule, to be deprecated, it is inevitable sometimes if the maximum revenue must be obtained. The entertainments tax, for example, places a larger percentage charge upon the lower prices of admission than upon the higher. Yet a progressive or even proportionate tax might raise the price of admission to such an extent that many people may go into the cheaper parts, or reduce the number of visits, or even abstain altogether. It is better that regressive taxation, if it is to be practised at all, should be levied upon luxuries than upon the necessaries of life. Even so, this is no justification for taxing the expensive luxuries of the rich at a lower rate than the more modest joys of the poor.

Tests of Ability to Pay. The problem of determining a person's ability to pay becomes more involved the more one attempts to find a solution. The following tests of ability have been submitted[1]—

(i) *The Quantitative Test.* This relates to the actual amount of money received.

(ii) *The Time Test.* It is not sufficient to base an estimate on a short period income, which may not be representative of a longer period.

(iii) *The Economic or Pure Income Test.* It must be known whether the income is subject to any wastage or necessary deduction.

(iv) *The Income Discrimination Test.* It is necessary to know whether there is any reserve behind the income,

[1] Stamp, *Fundamental Principles of Taxation*, pp. 14–15.

or whether its continuance depends entirely upon the continuance of the person's own efforts.

(v) *The Domestic Circumstances Test.* This has reference to any family claims on one's income.

To which may be added—

(vi) *The Economic Surplus Test.* It may be asked whether the person receives anything in excess of the sum required to induce him to give his service or lend his capital.[1]

ECONOMY, CERTAINTY, AND CONVENIENCE IN TAXATION.

While the first canon laid down by Adam Smith, viz., equality of sacrifice, may be regarded as an ethical precept, the others—certainty, convenience, and economy —are rather administrative rules. (To a great extent, the maxim of economy covers the three; and one writer[2] at least has gone so far as to include in it *all* the canons of taxation, equity included, for, it is contended, what is equitable must necessarily be in the true economic interests of the community.)

The canon of *certainty*, as extended, requires, on the one hand, that the taxpayer shall know exactly what he has to pay, enabling him to make the necessary adjustments in his income; on the other hand, that the State shall know as far as possible the amount of revenue likely to be derived. Vacillation tends to instability, and is to be deprecated. Hence the expression, "An old tax is a good tax, and a new tax is a bad tax." The speculative element may be unavoidable in business, but it is out of place in a scheme of taxation.

Though the rule of *convenience* in taxation is of special reference to the taxpayer, it may also be taken

[1] *See* pp. 292–293.

[2] Jones, *The Nature and First Principle of Taxation.*

as applying to the Government, which has regular periods of large out-payments.

With regard to the canon of *economy*, in the ordinary sense of the word, it is evident that as little as possible consistent with efficiency should be spent on administration and collection. Some taxes entail less expense than others. The British revenue, as a whole, costs about 4 per cent to collect, the income tax 1–1½, the customs duties 5–7, and the stamp duties ¾ per cent. For the same purpose, a tax should be so arranged that no third party between the taxpayer and the State should benefit from the impost. It will be shown below in connection with some forms of indirect taxation, that where the tax payment is very small, the price may be raised by more than the amount of the tax. Similarly, a tax on raw materials is inferior to one on finished goods, for the reason that costs may be increased at every stage, necessitating a bigger outlay of capital and therefore interest charge, which does not benefit the State. This also works against the principle of economy.

It may be added that the use of bonding houses is not only a great convenience, but by saving an outlay on interest, makes for economy and ultimately adds to the State revenue.

FURTHER CANONS OF TAXATION.

In addition to the four maxims laid down by Adam Smith, the following rules might also be applied to a system of taxation—

(i) That the tax should have a high net *productivity*, but not so high as materially to damage the wealth-producing sources whence derived. It is not sufficient to look only to the present.

(ii) That it is *better to have few productive taxes than many relatively less productive.* To a certain extent,

this is allied to the maxim of economy, since the collection of a few very productive taxes entails less cost than where the taxation is widely distributed.

(iii) That the tax should permit of *automatic increase* as the wealth and population increase. Taxation on sources which are permanently limited in amount would not be so satisfactory in this respect as on those which permit of expansion.

(iv) That the tax should be *elastic*, i.e. it should allow, if need be, of an increase in the rate *and the yield* without a corresponding increase in expenditure and machinery. This will depend largely on the nature of the commodity and the demand. An increase in the tax may lead to a fall in the yield.

SUMMARY OF THE CANONS OF TAXATION.

The various canons of taxation detailed above may now be summarized in convenient form—

(i) **From the Exchequer's Point of View.**

(*a*) *Productivity*. The yield should be adequate for the purposes required.

(*b*) *Elasticity*. In case of need, the Exchequer should be able to increase the revenue without necessarily devising new taxes.

(*c*) *Certainty*. The revenue should be determinate as far as possible.

(*d*) *Convenience*. This applies to the Exchequer as well as to the individual.

(*e*) *Economy*. Economy of administration and collection is a first requisite ; a tax may be morally justifiable (e.g. a tax on luxuries), but the expenses be so high as to nullify a great part of the revenue, quite apart from the waste of services which otherwise might be put to more productive use.

(ii) **From the Economic Point of View.** Under this heading come the general rules that *the tax should do as little harm as possible to the productive powers and activities of a community.* It is short-sighted policy to aim at a maximum revenue without regard to the effects on the capacity for production.

(iii) **From the Ethical Point of View.** The outstanding canon in this respect is *Ability.* While it is not possible to determine precisely everybody's individual capacity to pay, the rule should be adhered to wherever practicable. Individual taxes may be proportionate or even regressive, but the scheme of taxation *as a whole* should be on a progressive basis.

Section 2. The Incidence of Taxes

IMPACT AND INCIDENCE.

The *impact* of a tax must be distinguished from its *incidence.* The former is upon the person from whom the tax is collected, the latter rests on the person who pays it eventually. Broadly speaking, taxation is said to be *indirect* when the impact and incidence are on different persons, *direct* when the impact and incidence are on the same person (though it would not be safe to assume that a direct income tax can never be shifted). The incidence of a few forms of taxation may be shortly noted.

(i) **Taxes on Land.** In so far as the tax falls on the pure economic rent, it must be borne by the landowner. It was shown in the chapters on Distribution that economic rent is a surplus, the amount of which is determined for the superior, by the marginal, land. It is the last-named, not the superior, land which governs the price. Land on the margin was seen to pay no economic rent, and a tax on the superior lands that did so would have no effect in this respect on the marginal

land and therefore none on the price. (Taxes upon ordinary rents which include an element of interest, and other charges, may, of course, be passed on.)

But a tax on land may reduce the capital value. It is taken into account in contracting for purchase on lease, an allowance being deducted from the original value to cover the amount of the tax. If imposed for a sufficiently long period, the tax may seem to disappear as a present burden, since the charge has already been provided for. This has been called the *principle of amortization*. The statement that " an old tax is no tax " is of wider application than to land alone.

(ii) **Taxes on Income.** In the same way as a charge on pure rent, a tax on that part of income which is due to monopoly advantages must be borne by the person first paying it. But a tax on that portion which enters into real costs may be passed on.[1]

(iii) **Taxes on Commodities and Services.** The incidence depends partly upon the nature of the demand (including the possibility of substitutes), partly upon that of the returns to the producer.

If the demand is relatively inelastic, the consumer may be compelled to pay the whole of the tax. If the demand is elastic, the tax may be borne partly by the producer.

Again, if the article is produced under increasing returns (i.e. diminishing costs), and the addition of the tax to the price causes a smaller demand, a smaller output would bring about a higher cost of production per unit. This may lead to a still further rise in the price, which may now include not only the amount (or part) of the tax, but also the extra costs. Thus the consumer may pay more than the amount of the tax.

If the article is produced under constant returns (and

[1] *See also* pp. 293–294.

assuming there is no change in the demand) the consumer may pay just the amount of the tax.

If the article is produced under diminishing returns, and an addition to the price reduces the demand, a smaller output would cause a lower cost of production per unit. This will tend to prevent the price from rising by, and therefore the consumer from paying, the full amount of the tax.

In all these instances, free competition has for simplicity been assumed. Economic friction may for a time hinder the above tendencies, but sooner or later the incidence will fall in the way described. Where there is monopoly, the position is similar to that of economic rents.

The incidence of Customs duties will be considered later (pp. 297–298.)

DIRECT TAXATION.

The advantages and drawbacks of direct taxation may be briefly considered—

(i) **Advantages.** (*a*) Low cost of collection. The income tax, which is the chief form of direct taxation, only costs about 20-30s. per £100 to collect.

(*b*) The incidence of a direct tax is easier to trace than that of an indirect tax.

(*c*) An increase in wealth automatically yields an increase in tax revenue.

(*d*) Within reasonable limits, direct taxation is elastic in its yield.

(*e*) As the tax is paid directly to the State (i.e. not through a retailer or wholesaler), the sum received is no less than the amount contributed. (*See* p. 291.)

(*f*) Similarly, the taxpayer knows exactly how much he pays.

(*g*) Direct taxation can be made progressive, and so

be in accordance with the principle of equity. This would be very difficult in indirect taxation, except in so far as it is practicable to tax luxuries and articles of secondary importance

(ii) **Disadvantages.** These are drawbacks in the actual method rather than principle, and there is reason to believe that they will in time be overcome.

(*a*) The difficulty of calculating a basis of assessment so as to bring about a fair distribution of the burden.

(*b*) Many people prefer to pay in very small instalments, finding these more convenient than large cash payments. Linked with this is the argument that some people prefer to be taxed " in the dark." It is suggested that some persons who " unknowingly " pay a tax on, say, cigarettes or perfumes would resent having to pay a definite lump sum to the State, though it might be really less than the actual amount paid in small instalments. This savours of the " cynical " principle mentioned above.

Ignorance of tax payment is to be condemned. A man who is fully cognizant of his obligations is more likely to take an active interest in the way his money is spent.

(*c*) The inconvenience entailed in filling up forms has been adduced as a drawback, compared with the simplicity of indirect taxation.

(*d*) There is more possibility of evasion in direct taxation than where the tax is placed upon an article of sale. It has been alleged that the income tax is a " tax of honesty."

INDIRECT TAXATION.

To a large extent, the advantages of indirect taxation correspond to the drawbacks of direct taxation, while the disadvantages correspond to the benefits.

(i) **Advantages.**

(*a*) The taxpayer does not feel the burden so directly.

(*b*) It involves a convenient and easy method of collection.

(*c*) A tax on luxuries, etc., falls on the "surplus" element of the incomes of the relatively wealthy.

(*d*) Indirect taxation enables those with small incomes to be reached (though this would hardly justify taxes on the necessaries of life).

(*e*) Evasion is more difficult than in direct taxation.

(*f*) To a certain extent, indirect taxation is elastic (i.e. capable of yielding a higher or lower revenue according to the rate). The nature of both the article and the demand is very important. A tax on a necessary can be moderately increased or decreased, and the expected revenue fairly accurately estimated. Such a tax would accord with the maxim of certainty. On the other hand, a tax on something with a variable demand would not bear appreciable expansion. Thus an indirect tax might be elastic (i.e. in the resultant revenue) when the demand for the article is inelastic; and *vice versa*.

The principle is really the same as that governing prices in general. A high tax might mean such a falling-off in demand that the revenue is less than when the tax is smaller. This actually happened recently, when increased taxation on cigars yielded a smaller revenue; the subsequent reduction in the rate of taxation was followed by such an increase in the demand that the revenue was increased.

(*g*) In so far as it is desired to check the consumption of a noxious article, a tax may have the desired effect where comparatively poor people are concerned, but it would not reduce the consumption on the part of the well-to-do. But it is often difficult to say whether such

a tax is regarded primarily for salutary or for revenue purposes.

(ii) **Disadvantages.**

(*a*) Indirect taxation is inequitable in that it is proportionate rather than progressive. Where the tax is on a necessary, this inequity is accentuated in that the poor spend a greater proportion of their income on the elementary needs of life than those more fortunately placed.

(*b*) The revenue is uncertain unless the demand for the article is very inelastic.

(*c*) The incidence is often difficult to determine.

(*d*) It is comparatively expensive—

1. To the State, in that the costs of collection are often heavy (though it is contended sometimes that the shopkeeper serves as a tax-collector without pay).

2. To the consumer, in that the tax may cause a rise in the price higher than that actually warranted, e.g. a fraction of a penny added to the tax on tobacco may add a full penny to the price. (Against this it may be contended that the shopkeeper has to bear a bigger outlay and so suffers a certain loss of interest, which is compensated by the added charge to the article.)

(*e*) It is inconvenient to trade, especially where it is levied on an article not used for "final" consumption, but for service in further production. Because of the interest to be paid on the larger initial outlay of capital, and for other reasons, the price of the finished product may be raised by an amount higher than that justified by the tax itself. In such cases, the State receives less than is contributed by the taxpayer.

THE CONCEPTION OF SURPLUS AS APPLIED TO TAXATION.

A popular conception in recent years has been the theoretical division of incomes into "costs" and "surpluses" in a manner indicated by the doctrine of rent (*see* Chapter X, § 2), leading to the principle of taxing the surplus. Mr. J. A. Hobson is a strong advocate of this application of the rental doctrine. He states[1]—

"(1) That all taxes must be treated as deduction from real income.

"(2) That income is divisible into—

(*a*) Economically necessary payments for the use of factors of production, i.e. costs.

(*b*) Unnecessary or excessive payments, i.e. surplus.

"(3) That all taxation should be directly laid upon surplus, because, if any taxation is put upon "costs" the process of shifting it on to surplus first involves waste and damage to production, and is frequently made a source of extortion from customers; secondly, it deceives the public by concealing the final incidence."

Costs are taken to indicate the minimum income necessary to evoke an *increasing* supply of the agents of production, not merely the maintenance of existing amounts. The term covers a standard efficiency wage for labour, a normal profit for organization and enterprise, and a minimum interest necessary to induce saving. The surplus is the difference between income and actual costs. While it would be possible to impose a tax on costs for a short period, the ultimate result might be a reduction in productivity and supply. In the long run, it is claimed, a tax on costs will tend to rebound on to the surplus. A tax imposed directly on the surplus, however, cannot be shifted (for reasons previously explained) and, owing to the nature of the

[1] *Taxation in the New State.*

surplus (i.e. income not the result of specific effort), may yield a large revenue with the minimum of sacrifice.

In practice, however, it is difficult, though not impossible, to estimate within reasonable measure the amount of surplus. There is the possibility, too, of surpluses becoming capitalized, e.g. the purchase of a piece of land, the price based partly on an estimate of possible increments in value. Economic friction also may prevent an automatic rebound of a tax from costs to surplus.

Section 3. *Some Particular Taxes*

THE INCOME TAX AND INHERITANCE DUTIES.

The income tax in its modern form was first levied during the Napoleonic Wars and, being regarded specifically as a war tax, was repealed after Waterloo. It was re-imposed in 1842, at first for a period of three years only, but it was so productive that it became permanent in our system of taxation. At first there was a flat rate (it fell to 2d. in the £ in 1874), but latterly the progressive as opposed to proportionate principle has been followed, while the exemption limits have been arranged for the different classes more in accordance with the rule of equity. [Included in the income tax, for present purposes, is the personal property tax.]

The income tax has the advantage of elasticity, which, however, is subject to definite limits. Secondly, it is very productive and is economical to administrate. Thirdly the impact and incidence are more identified than in most taxes. Finally and most important, it satisfies more satisfactorily than indirect taxation the principle of equity, in that the tax can be graduated, and suitable exemption limits arranged. Though income alone is not an infallible guide to ability to pay—*see* the

suggested tests of ability mentioned above—it is the best single test available.

Inheritance Duties involve least sacrifice on the part of the taxpayer. Taxation on " windfalls " has for long been advocated as an important source of revenue consistent with the minimum hardship. One form of inheritance tax, the estate duty, is levied on a progressive scale according to the wealth left by the deceased; while the other forms (the legacy and succession duties, the former on personal property, the latter on land or real property) are regulated by the amount bequeathed to, or inherited by, individual legatees or inheritors.

In arranging inheritance taxes, means are devised (though not always successfully) to prevent evasion by gifts during lifetime. There is also the possibility that too high a rate of taxation may discourage saving, though perhaps the importance of this argument has been exaggerated. Some saving is effected because it cannot be helped; also for the reason that many people abstain from immediate consumption whatever the rate of taxation, the provident impulse to save being more powerful than any discouraging influence of heavy imposts at death.[1]

LAND AND HOUSE DUTIES.

The land tax and inhabited house duty are not very lucrative sources of income. The land tax is a survival of a general exaction intended to be levied at first on other forms of wealth, but experience proved the general tax to be impracticable. The inhabited house duty is the descendant of the earlier " hearth " tax and the subsequent " window " tax, levied on people in proportion to the number of hearths or windows in their houses. This was a crude attempt to arrive at one's

[1] *See* p. 120.

ability to pay, and is still to be found in a few countries. But in so far as the window tax led to reduction in the number and bricking-up of windows, it really became a tax on health.

Land Value Duties. These duties were introduced in the Budget of 1909, and, although they have, in the main, been repealed, the principle governing their imposition is still of first importance and likely again to be acted upon. The duties were of four kinds—

(*a*) *General Increment Value Duty.* The " unearned increment " of land (i.e. the increase in value due not to the owner's efforts, but to social forces) was to be subject to a duty payable when the owner realized the increment by sale.

(*b*) *Reversion Duty.* A duty was to be payable by the lessor on the termination of the lease according to the increment accruing to him. Agricultural land was to be exempt, and also leases for periods of less than twenty-one years.

(*c*) *Undeveloped Land Duty.* A duty was to be imposed on the site value of undeveloped land, the value of which exceeded £50 per acre, and which had not been developed by the erection of buildings for the purpose of any business other than agriculture.

(*d*) *Mineral Rights Duty.* A tax of 1s. in the £ was levied on the rental value of all rights to work minerals, and of all mineral way-leaves.

The necessary valuation and administration being found difficult and expensive, the duties have been abolished since the war, with the exception of the mineral rights duty.

CUSTOMS DUTIES.

As distinct from and less productive than Excise duties, which comprise the form of indirect taxation

levied on articles produced within a country, Customs duties are imposed on imports, and (though to a much smaller extent—now non-existent as far as this country is concerned) on exports[1]. Customs duties may be either *specific*, i.e. imposed according to weight or number of the commodities, without direct regard to their value; or *ad valorem*, i.e. levied in proportion to value.

A difficulty of *ad valorem* taxes is the possibility of fraudulent valuations, while specific duties are open to the charge that they penalize the less valuable goods of a particular class. The British Customs duties are mainly specific, the articles taxed being very few compared with a century ago. The rule has been to concentrate on a small number of commodities widely consumed.

Supporters of Customs duties belong to one or two classes, or to both: those who seek a lucrative revenue and those who desire to afford protection to home industries. (For the economics of Protectionism, *see* Chapter XVI, § 2.) While the revenue derived from Customs duties may be appreciable, such a form of taxation is subject to certain drawbacks both in common with, and in addition to, those of indirect taxation generally—

(i) *Non-Progressive Nature.* In so far as Customs duties are imposed for revenue purposes rather than for protection, they must be levied upon articles in great demand. Many of these commodities are of general consumption, and, for reasons previously explained, take up a smaller proportion of expenditure

[1] During the South African War a temporary export duty was imposed on British coal. At the present time export duties are to be found in Germany, where, owing to the depreciated exchanges, foreign merchants can purchase goods at abnormally low prices.

as income rises. This would be truer of the taxes on tea and sugar than on wines and spirits. In common with other indirect taxes, the burden may be proportionate rather than progressive.

(ii) *Inelasticity.* Customs duties are more inelastic than the average indirect tax. Changes of tariff rates tend to unstabilize international arrangements; complications may arise here that do not enter into the question of internal Excise duties.

(iii) *Uncertainty.* A peculiar defect of Customs duties is that they may yield least when the Government needs are greatest, as in time of war, when, through the curtailment of foreign trade, the Customs revenue declines.

To all of which should be added—

(iv) *Effect on Industry.* As was shown in the examination of Protectionism, taxation of imports may interfere with the natural disposition of a country's resources and so reduce the total net product.

The Incidence of Customs Duties.

The incidence of Customs duties is subject to the same principles that govern incidence in general. "Making the foreigner pay" is no easier than making a home producer pay, if it is at all possible to shift the tax on to the consumer. The difficulty is increased by the possibility of the foreigner finding another market for his goods.

If country *A* should be the only market for *B's* only product, and exports in return commodities for which *B* has a very inelastic demand, it may be possible for *A* to impose a tax on *B's* goods which the merchants in *B* have to bear. Or if country *A* had a monopoly of something urgently required by country *C*, but whose demand for *C's* product in return was very

elastic, an *export* duty on the goods so urgently required by *B* might be passed on to that country.

These examples, however, are of hypothetical rather than practical interest. Britain and her demand for Greek currants has been quoted as an approach to the first position; Britain and her monopoly of steam coal goes half-way in the second instance. Neither argument is sufficient to controvert the general statement that it is impossible to make the foreign merchant give a *permanent* contribution to home revenue. Spasmodic "snap taxes" may do it for a short time, but in the long run either the burden will work itself through to the home consumer or the foreigner will divert his products to other markets. But such taxes are to be condemned in any case, as they tend to uncertainty and instability; and any transitory benefit, if any, is more than nullified by the ultimate loss.

To strengthen the contention that the foreigner cannot be compelled through taxation to make a permanent contribution to home revenues, is the fact that any such payment would, in effect, be in the form of goods for which the receiving country is wont to pay in exports. Imports "for nothing" may mean unemployment in those industries accustomed to produce for exports. (The same applies, to a large extent, to indemnities.)

Section 4. *Local Taxation*

LOCAL AND NATIONAL TAXATION COMPARED.

It has not been deemed necessary to devote much space to the theory of local taxation, as the general principles are the same for local rates as for national taxes. What has been said about the one, can be applied with equal truth and force to the other. The

incidence of local rates, too, is subject to the same conditions.

Certain differences of method and administration rather than of principle can be noted between local and national revenue.

(i) It is more possible, when taxation affects comparatively few people, to trace a direct connection between payment made and value received. Hence a certain benefit or *quid pro quo* element to be found sometimes in local finance, *though establishment of the fact is not a justification of the principle.* As was stated in connection with national taxation, absolute insistence on a *quid pro quo* would be unjust and, in practice, impossible. Sometimes a distinction is drawn between "onerous" and "beneficial" expenditure of local authorities, the former being of national, the latter of immediately local, advantage. It is contended that the costs of the "beneficial" services should be locally defrayed. But national and local benefits so interpenetrate as to be often indistinguishable.

(ii) Different from national taxation, local financial systems are not uniform all over the country. This, in the absence of qualifying factors such as suitable grants-in-aid from the central Exchequer, leads to the anomaly that relatively poor districts may have to pay a higher poor rate than wealthier districts which are better able to afford it.

(iii) Local taxation is based solely on house and business rents, which are not an altogether satisfactory index of ability to pay. Various schemes have been put forward for a *local income tax.* The difficulties adduced against such schemes are, firstly, that people who make their incomes in a particular locality may live outside the area covered by its powers; secondly, that many large businesses are not concentrated in any

one area (e.g. banks, railways, multiple stores, etc.), and that taxation on such enterprises is more effective and economical when conducted entirely on a national basis.

(iv) Local rates are more certain in their yield than national taxes; the estimated expenditure of relatively small areas is less liable to variation, while the rates can be adjusted so as to secure the exact amount required.

GRANTS-IN-AID.

Grants-in-aid are the contributions from the Consolidated Fund towards local expenditure. Local developments and improvements are matters of national importance, and too hard a distinction should not be drawn therefore between local and national finance. While local authorities are justified in demanding financial assistance from the central government, the latter also is justified in watching over and checking the outlay of such bodies.

Several reasons for grants-in-aid may be observed—

(i) Grants-in-aid should be paid when a local authority engages upon developmental work of national importance.

(ii) They are necessary where the local body is incapable financially of carrying out its proper functions.

(iii) They may provide a stimulus to local authorities to undertake necessary functions.

(iv) They help to reduce the inequality of burden as between one district and another[1]—provided that they are applied properly, and not in proportion to the locality's rateable value, which would mean that the wealthiest districts with the least need would get most

[1] For further treatment of (iv)–(vii), *see* Webb, *Grants in Aid*, Chap. II.

and the poorest districts needing most assistance would get least.

(v) They are necessary to give weight to the suggestions, criticisms, and instructions of the central authority.

(vi) They are the means of bringing to bear upon local bodies the wisdom and experience of the central Government as compared with the less accustomed and equipped administration of small towns.

(vii) They are the means of enforcing on local authorities the " national minimum " of efficiency so necessary in the national interests.

Though the scope and activities of local bodies are widening, the present system of rating is necessarily limited in its yield, while a local income tax is not likely to be put into operation. Still further dependence on State assistance, therefore, appears inevitable. Somewhat haphazard in their evolution, grants-in-aid have come to be recognized not merely as financial helps, but also—and this is of equal importance—as a means of regulating, co-ordinating, and stimulating local enterprise, and bringing about a national efficiency consistent with the necessary amount of local autonomy.

CHAPTER XXI

PUBLIC DEBTS

Section 1. *Public Loans*

SOURCES OF PUBLIC FUNDS.

IT is a rule of public finance that normal expenditure should be met as far as possible out of normal revenue. In ordinary times, the tax is the principal instrument; but the heavy requirements of modern wars compel resort to other means, even if taxation is raised to the maximum. Extraordinary expenditure is usually met by borrowings, though supplementary use may be made of currency manipulation and the sale of national property.

As shown in Chapter XIII, interference with the currency may have dire results, for debasement of the coinage or, as is more usual in modern times, over-issue of paper currency, leads to depreciation in the purchasing value of money. The higher prices that have to be paid for goods and services are tantamount to a forced levy on the people. If all incomes were equal, such depreciation would hit everybody alike and be little different in its effects from a general tax, except that the latter would probably be more economical, both from the point of view of the Exchequer and that of the community at large. But as incomes vary considerably, the burden of inflation and higher prices falls more heavily on the poor than the rich, for the effect is similar to that of a proportionate compared with a progressive tax. From the point of view of equity and ability to pay, the results of currency manipulation are very unequal.

Added to this is the detriment caused to the foreign exchanges and to trade generally.

From the sale of property, modern States cannot expect to raise an appreciable amount. The tendency seems to be for Governments to acquire further property rather than dispose of it, and large sales of public lands, etc., might be considered retrograde. After a war, of course, there is a certain amount of surplus stock to be disposed of, which may add a useful amount to the State's income; though to include such a sum in the ordinary revenue may give too sanguine an appearance to the national balance sheet and be altogether misleading.

This chapter will be concerned with the principles and methods of public loans, and the steps that are, or might be, taken to reduce the national indebtedness.

TAXATION AND LOANS.

The general statement that a loan is voluntarily raised from capital, whereas taxation is a compulsory deduction from income, is truer of normal times than the unusual period through which we are now passing, when capital has to be encroached upon only too frequently to meet the high taxation. It is not very practicable in any case to consider capital altogether apart from income, as they are largely interdependent and influences on the one cause a reaction on the other.

An obvious distinction between a tax and a loan is that the former is non-repayable and does not exact a continual toll in the form of interest. Over 95 per cent of the British National Debt is (nominally) repayable within periods from one to seventy years and, besides the problem of redeeming the capital debt, the interest that has to be paid makes loans less economical in this respect than taxation. It is not suggested, of course,

that a war costing 10,000 millions could possibly have been financed out of taxation alone. Loaning was inevitable to some extent; it is the nature of this extent that calls for examination.

As was stated in the previous chapter, the amount that it is *possible* to raise by taxation is not necessarily a true index of benefit derived, for regard should be paid not merely to the yield at the time, but also to the effects on the wealth-producing sources on which taxes have been levied. The taxable capacity of a nation is not indicated by the total revenue that *could* be obtained at any time, but rather by the amount which may be exacted from the income of a community without materially impairing its productive powers. This does not preclude the possibility of a levy on capital as distinct from income; such a levy will be considered later.

One advantage that taxation possesses over loans calls for mention. During the war long-dated loans were often contracted at a fixed rate of interest, which would be determined by the high rate prevailing at the time. As the general price-level fell, the purchasing value of the fixed money interest rose, causing an increase in the *real* rate of interest. Suppose a man lent £100 to the State during the war, and received a guaranteed interest of £6 per annum for a number of years. Out of the first dividend of £6 he could buy (say) a winter overcoat. But when prices have fallen he may be able to buy for the same outlay both an overcoat and a pair of boots. He is thus able to demand a greater volume of goods than what he was prepared to accept when the loan was made. In practice, this may be difficult to avoid entirely, but it demonstrates the advantage of a tax, which should be applied as far as possible within the limits previously mentioned. On the other hand, there were some comparatively

short-period loans made at the beginning of the war at a lower rate than later; the interest on these fell in real value for a time. But the former tendency predominated.

In this connection, however, it is interesting to note the 5–15 year Treasury Bonds issued in 1920, the interest on which, subject to a minimum of 5 per cent, varied with the rate of the short-term (up to twelve months) Treasury Bills. The response to the two issues of this class was very poor, due partly, perhaps, to the want of fixity in the rate of interest.

All this does not imply an inferiority of long-period compared with short-period loans. (The latter may take the form of borrowing from the Bank of England in the shape of "Ways and Means Advances" and from the public on Treasury Bills.) Temporary loaning, if overdone, may lead to disturbance and uncertainty in the national finances, while the absence of an effective check on such borrowings by Government officials is not very satisfactory. While a long-period loan is at such times superior to a short-period loan, a tax, applied as far as practicable, is often preferable to either.

Year.	Proportion of Government Income raised in Taxation.
1914–15	Over 33%
1915–16	,, 20%
1916–17	,, 25%
1917–18	,, 25%
1918–19	,, 33%
1919–20	,, 80%
1920–21	100%[1]

FINANCING BY BANK CREDITS.

An illustration of Government borrowing and its effects upon bank deposits and credit, is given in the

[1] In 1920–21, there were net repayments amounting to £237 million.

First Interim Report of the Committee on Currency and Foreign Exchanges, 1918—

"Suppose . . . that in a given week the Government require £10,000,000 over and above the receipts from taxation and loans from the public. They apply for an advance from the Bank of England, which, by a book entry, places the amount required to the credit of Public Deposits in the same way as any other banker credits the account of a customer when he grants him temporary accommodation. The amount is then paid out to contractors and other Government creditors, and passes, when the cheques are cleared, to the credit of their bankers in the books of the Bank of England; in other words, is transferred from 'Public' to 'Other' deposits; the effect of the whole transaction thus being to increase by £10,000,000 the purchasing power in the hands of the public in the form of deposits in the joint-stock banks, and the bankers' cash at the Bank of England by the same amount. The bankers' liabilities to depositors having thus increased by £10,000,000, and their cash reserves by an equal amount, their proportion of cash to liabilities (which was normally before the war something under 20 per cent) is improved, with the result that they are in a position to make advances to their customers to an amount equal to four or five times the sum added to their cash reserves, or, in the absence of demand for such accommodation, to increase their investments by the difference between the cash received and the proportion they require to hold against the increase of their deposit liabilities. Since the outbreak of war it is the second procedure which has in the main been followed, the surplus cash having been used to subscribe for Treasury Bills and other Government securities. The money so subscribed has again been spent by the Government and returned in the

manner above described to the bankers' cash balances, the process being repeated again and again until each £10,000,000 originally advanced by the Bank of England has created new deposits representing new purchasing power to several times that amount."

GENERAL LIMITS TO GOVERNMENT BORROWINGS.

One is no more able to define a precise limit to Government borrowings than to taxation. It was noted above that the limits to what *could* be obtained in taxation are wider than those consistent with the retention of full productive capacity. It is shortsighted finance, whether applied to taxation or loans, to aim at the maximum possible without regard to the ulterior effects, though in time of emergency the State cannot always stop to consider remote contingencies.

The general limits to public borrowings may be very broadly indicated. The first limit is set by the amount that is saved over and above the sum necessary for depreciation, renewal, and the provision of new capital. The second limit is determined by the amount of saving that is physically possible, though the minimum necessary for national physical needs would be rather indeterminate. For a time it is possible to go beyond these limits and live on capital, but the uneconomic effects of such a policy are very soon felt. Outside these home limits is that set by the amounts that can be borrowed abroad; here the predominant factor is the credit of the borrowing country rather than the financial capacity of the lending country.

It is almost impossible to measure these limits owing to the variability and, sometimes, the non-economic nature of many of the factors. The problem is still further complicated by inflated values, which may place

too optimistic an assessment on a country's real wealth, and so make the limits appear wider than they really are.

Section 2. The National Debt and Its Reduction

THE BRITISH NATIONAL DEBT.

The British National Debt, which at present stands at nearly 8,000 millions, is due very largely, of course, to the recent world war; in 1914 it stood at a little over 700 millions. The amount of Debt has risen from £15 to about £175 per head, while the charge on the Debt has increased from 10s. to over £7 10s. per head. In comparing these periods, however, it should be remembered that wealth and income are necessarily measured in terms of money and not in goods and services; comparison without regard to the purchasing value of money at different periods may be misleading. Thus the wealth of the country measured in money increased by nearly 10,000 millions during the war, while the income increased by over a thousand millions; if it were possible to assess wealth and income in actual goods and services, the figures at the end of the war would probably be much nearer those of 1914, if not actually below them. But while it would be unwise to attribute too much importance to the figures themselves for comparative purposes, the percentages of Debt to wealth, and charge to income, at different periods, may be compared with reasonable measure of accuracy. At the end of the Napoleonic Wars the percentage of Debt to wealth was a little over 30 per cent; in 1914 it had fallen to less than 5 per cent; and at the end of the recent war stood at about the same proportion as after the Napoleonic Wars. Similarly the percentage of Debt charge fell from 8 per cent in 1817 to 1 per cent in 1914, and rose again to 10 per cent in 1919. It is

interesting also to note that while 63·75 per cent of the cost of the Napoleonic Wars was met out of taxation, only 28·74 per cent of the cost of the recent war was met in this way.

The National Debt is almost entirely due to wars; It is estimated[1] that the Government spent more in the six years 1915–20 inclusive than in the previous two-and-a-quarter centuries. Of the 22,000 millions spent by the Government between 1688 and 1920, the sum of 14,000 millions was spent on war, two-thirds of this in the last six years of the period.

It may be added that the very heavy burden under which this country, in common with others, is now suffering cannot be finally measured until the question of reparation and international indebtedness is cleared up. While Britain is a creditor to other countries for a higher nominal sum than that for which she is debtor, the position does not bear a too favourable interpretation. Financial experts would welcome the mutual cancellation of these amounts without regard to their disparity, while some go further and propose that Britain should forego the debt due to her though still acknowledging the obligation to the United States. This is not philanthropy, but sheer business, as it is expected that what (if anything) may be lost on the one hand will be more than compensated by the revival of trading relations and resultant gain.

Though the position is still uncertain, the recent Balfour Note would suggest full recognition of the urgency of the problem and the possibility of early steps to bring about some form of settlement.

Even excluding the external debt of about a thousand millions, there still remains the formidable internal obligation of about 6,500 millions.

[1] Harvey E. Fisk, *English Public Finance.*

Forms of Government Debt.

The National Debt consists almost entirely of two parts, the Funded and the Unfunded Debt. The *Funded Debt* is embodied in stock and is practically permanent. The *Unfunded Debt* is repayable within specified periods up to seventy years. The Floating Debt (Ways and Means Advances and Treasury Bills) is only one form of unfunded debt; all unfunded are not floating debts. In 1914, £588,000,000 out of a total debt of £711,000,000 was funded; at the present time, the amount of funded debt has fallen to £315,000,000, while the total debt has increased tenfold.

The table[1] given on opposite page shows the position of the National Debt on the 5th August, 1922, compared with previous dates.

REDUCTION OF NATIONAL DEBT.

Necessary in normal years, it is imperative at the present time to devise means to effect as great a reduction of the National Debt as is economically possible and desirable. Before considering the proposals that have been made for a Capital Levy and (though to a less extent) for repudiation or forced reduction of interest, some of the methods that have been adopted may be noted.

(i) **Application of the Surplus Annual Revenue.** This is perhaps the simplest method, but it cannot be very effective unless the debt is very small. At a time when the interest alone is nearly a million a day, little opportunity for a reduction of the capital amount is provided from this source. Besides, a surplus may evoke a cry for a reduction rather in the rate of taxation.

(ii) **Extra Taxation.** This is a very desirable method,

[1] Taken from *The Economist*, 12th August, 1922.

NATIONAL DEBT

(Million £)

	Aug. 1, 1914.	Mar. 31, 1918.	Mar. 31, 1919.	Dec. 31, 1919.	Mar. 31, 1920.	Mar. 31, 1921.	Dec. 31, 1921.	Mar. 31, 1922.	Aug. 5, 1922.
Funded Debt	588	318	318	315	315	315	315	315	315
Term. Annuities	30	22	22	20	19	18	17	17	17
Unfunded Debt: 3½% War Stk.	..	63	63	63	63	63	63	63	63
4½% War Stk.	..	16	14	13	13	13	13	13	13
4 & 5% War Stock	..	2,091	2,068	2,047	2,040	1,995	1,956	1,943	1,973
National War Bonds	..	649	1,636	1,509	1,476	1,413	1,201	1,201	1,090
4% Funding Loan	..	..	..	409	409	405	405	405	405
4% Victory Bonds	..	..	..	360	357	348	346	346	346
3½% Convers. Loan	..	..	..	..	..	..	266	266	479
5-15 yr. Treas. Bonds	..	..	..	..	..	23	24	24	24
5½% Treas. Bonds	..	..	..	..	..	..	273	380	310
5% Treasury Bonds	..	..	..	..	..	..	..	40	40
Do. by tender 5%	..	..	..	..	..	..	..	8	69
Do. by tender 4½%	..	..	..	..	..	..	..	..	53
Treasury Bills	15	961	957	1,107	1,107	1,121	1,060	882	740
Exchequer Bonds	20	392	384	323	319	289	218	194	159
National Savings Certs.	..	138	227	267	274	285	294	324	345
War Expend. Certs.	..	23	..	..	..	..	..	..	..
Other Debt	..	944	1,241	1,306	1,181	1,132	1,097	1,090	1,081
American Loan	..	51	51	51	51	..	..	..	..
Temporary Advances	1	204	455	243	205	154	200	147	164
	654	5,872	7,435	8,033	7,829	7,574	7,748	7,658	7,686
Other Capital Liabilities	57	49	46	46	47	49	51	50	51
Total Liabilities	711	5,921	7,481	8,079	7,876	7,623	7,799	7,708	7,737

but, it must be repeated, there are limits to the taxable capacity of a community. While certain nations have not made as full use of the taxing instrument as might be reasonably expected, it would be impossible for this country to wipe off the Debt within a short period even if the utmost taxable limits were reached.

(iii) **Redemption by Purchase of Stock.** When Government stock is offered on the market at a comparatively low price, public officials may purchase a certain amount of such stock, and cancel it, substituting a smaller for a larger debt. This method is only practicable, of course, when money is available at lower rates than are being paid on Government stock. Further, there is the likelihood of a rise in the price of the stock if the State officials show themselves too eager to effect purchases for cancellation.

(iv) **Conversion.** Conversion into stock bearing a lower rate of interest is another means adopted. Where the loan is repayable at any time, and if new money can be obtained at a lower rate than is being paid to the fundholders, the Government may present to these creditors the alternative of a lower rate of interest or, if they refuse, repayment of their principal.

(v) **Terminable Annuities.** By this means, permanent is converted into temporary debt. An annuity is purchased through the Post Office or from Chancery funds, and interest is paid for a definite period or a lifetime. The rate of interest is higher than the ordinary rate on the Debt (meaning higher taxation during the period of the annuity), but when the payments cease, so much Debt has been redeemed. This device is not so popular as in former times; the present capital figure standing to annuities is only seventeen millions.

Terminable annuities are in effect a form of Sinking Fund, which may be considered separately.

SINKING FUNDS.

This method of reducing debt is adopted not only by Governments, but also by local authorities, the latter being often required by the terms of their powers to repay borrowed money within certain periods. The principle, stated shortly, is to provide out of income a certain sum of money so calculated that, invested at compound interest, it will accumulate to the amount required by the time the loan is to be redeemed.

Raiding the Sinking Fund is to be deprecated, though the Chancellor of the Exchequer, desirous of keeping down the Budget estimates, may find it expedient sometimes to omit or reduce the amount of such provision (witness the absence of allowance for the " New " Sinking Fund in the Budget, 1922-23).

Forms of National Sinking Funds. The chief forms are—

(*a*) *The New Sinking Fund.* This is the balance on the annual charge after providing for interest and the cost of management.

(*b*) *The Old Sinking Fund.* This consists of surplus revenue in any year applied to the redemption of debt.

(*c*) *Victory Bonds Sinking Fund.* A certain number of these bonds are drawn for repayment on 1st September of each year and are discharged.

(*d*) *Depreciation Fund.* This was set up under the Finance Act, 1917, in accordance with which sums are issued by the Exchequer and applied for the purchase of various Government stocks. In the first three years of this scheme, nearly a hundred millions worth of stock was so purchased and cancelled.

(*e*) In addition to these are the *Terminable Annuities* described above.

A CAPITAL LEVY AND DEBT REDUCTION.

The question of a levy on capital has provoked much discussion of late. Such an impost must not be confused with repudiation of part of the debt or a forced reduction in the rate of interest.

Repudiation is opposed on both ethical and economic grounds. Contracts and obligations were entered into, and such a breach of public faith as repudiation implies would so upset the economic and credit organization that the ultimate gain would be very doubtful. Foreign creditors and resultant complications have also to be considered. Besides this, there is no reason why people who lent their money to the State should be penalized, while those who invested their money elsewhere should go scot-free. Any sacrifice necessary should be generally borne, and not confined to a particular class of investment holder; it must be remembered that it is not only the wealthy who hold Government stock, nor are *all* wealthy people in possession of it.

The suggestions to reduce the rate of interest are open to similar criticism, though not to the same degree. It seems justifiable from one point of view that the nominal rate of interest should be reduced with a fall in prices in such a manner that the real purchasing value of the income so derived remains constant. It might be contended that in the same way as some wages vary on a sliding scale, based on the cost of living, so also should the rate of interest. But such a policy might seriously prejudice future public borrowings, not to mention the unequal distribution of the sacrifice as between those who have lent to the State and those who have invested in other directions.

A Capital Levy has met with more support than the other proposals, though it has also encountered strenuous

opposition. Such a levy, aimed at reducing the National Debt by about a half (this is the proportion usually stated) would take the form of a general impost on capital possessions of all kinds. In order to secure equity of sacrifice, it would be assessed on a progressive basis. Small incomes would be exempt, and the proportion exacted by the State would increase with the amount of capital held.

It is claimed in its favour that the National Debt would be considerably reduced, that the annual charge, and therefore the rate of taxation, would be lower, and that a more speedy return to normal conditions would be ensured. On the grounds of equity it is held that a capital levy is no more unjust than high taxation, that it is simply an extension of the principle of ability to pay. It is further maintained that in time of emergency, the State is no less justified in conscribing the capital than the lives and services of its citizens. Some opponents contend that it is not capital but income that counts, and that wealth left in private hands is put to more productive use than capital in State possession. But, the advocates of the levy reply, this misses the real point, as the capital would not remain in the hands of the State, but would be transferred to the owners of Government stock in cancellation of the debt, and that neither the amount nor the productivity of the capital in the country would be reduced.

The critics of such a levy base their arguments on grounds of its impracticability rather than immorality. Some object that wholesale realization of property would cause such a fall in values as seriously to threaten the economic system. In reply to this, the protagonists of the levy urge that unduly large sales would be unnecessary, as the State would merely serve as a kind of clearing house, through which the rights to

shares and other property would be transferred to fund-holders in settlement of public debt. Again, it is argued that some professional workers have high incomes, but very little capital in the form of material goods, and that it would be unfair to exempt these people from the levy. This, too, has been anticipated, it being suggested that such persons should have their incomes capitalized and (all factors taken into consideration) pay an annual sum estimated to yield eventually the amount of the levy.

One could go on enumerating the pros and cons of a capital levy, but sufficient has been said to indicate the nature of the problem. The proposals for a levy on war fortunes do not seem to have borne much fruit and, in any case, such a restricted levy would not have yielded an adequate sum. If a levy is to be adopted at all, it is better that it should be general, and distribute its burden as equitably as possible.

APPENDIX

THE DEVELOPMENT OF ECONOMIC THOUGHT.

ECONOMICS was stated at the commencement of the book to be but one branch of the general science of social relations. Only in modern times has a serious attempt been made to study the subject as distinct from its sister sciences. It was natural that with the great industrial and commercial changes in the eighteenth and nineteenth centuries there should be an increased share of attention paid to the science that deals with one's activities " in the ordinary business of life."

Early economic thought was so mingled with religious, ethical, political and legal doctrines, that it was often difficult to trace any real distinction. In practice, of course, it is inadvisable to demarcate too sharply between the different branches of social study. Too much specialization of thought may yield conclusions that are remote from actual conditions, and lead to suggestions that are quite impracticable. On the other hand, it is necessary for purposes of clear study that some division be made. The different groups of elements must be sorted out before one proceeds to detailed analysis.

Speculative thought and inquiry about economic problems has been going on ever since man has had to contend with them. From the beginning of history he has been searching for the principles that govern his wants and satisfactions. Throughout its evolution, economic theory has reflected more or less the environment of the period. It is inevitable that the material facts of an age should be so mirrored since they provide to a large extent the incentives for inquiry and research, policies and programmes.

In these final lines will be given not so much a summary of different economists' theories as an outline of the general progress of economic thought.

THE EARLY PERIOD

To commence with the early Greeks: one finds that despite the predominance of a small aristocratic class in their city-states, there gradually grew up a new class consisting of traders, who introduced a certain commercial spirit, and developed the monetary and credit systems in a way hitherto unknown. This gave rise to inquiry into the nature of money and, particularly, of interest, which presents one of the oldest problems in economics. Thought was also stimulated on the question of slavery, by which system most of the production was then carried on. It was pointed out by more than one writer of the time that slave-labour was not necessarily economical; it was the germ of the recognition of the *real* costs of labour.

Prominent among the Greek socio-economic philosophers was *Plato*, who in his "Republic" drew up a scheme for an ideal society, containing some noteworthy contributions to economic knowledge. *Aristotle* also is outstanding in this respect, and his contention that money was "barren," and therefore interest unjustifiable, was responsible later for much of the Canonist doctrine of the Middle Ages. Other Greek writers were *Thucydides* and *Xenophon* who considered rather the domestic side of economic life.

The Romans did not add much to economic knowledge. A small amount was written on husbandry; but *Cicero* voiced the general opinion when he deprecated trade, maintaining it was not a fit occupation for a true Roman.

It was not until the **Renaissance** that any serious analysis was undertaken, but economic inquiry was largely overshadowed by the religious and the political. The influence of Aristotle was still felt, and the deprecation of usury was to a large extent due to his teaching. Capital as yet had not become very important as a factor of production, and since money borrowed was often put to a non-productive use, the mediaevalists could not find a justification for a payment for the use of money. In accordance with the same beliefs, it was held that a trader was not justified in demanding more than a " fair " price for his goods. Hence developed the common practice of fixing a " just price " for articles of sale. Most of the organization was in the hands of the gilds, which, particularly at first, had a strong religious and social element. Among the mediaeval theorists on economic problems was *Nicholas Oresme*, who, in a work on money (1373), formulated the rule relating to " good " and " bad " money, usually known as Gresham's Law. (*See* Chapter XII, § 2.) *Copernicus*, too, wrote on monetary matters.

Until now, English writers had not been very prominent, but the sixteenth century heralded a period of trade activity and literary attainment. *Sir Thomas More*, in his well-known " Utopia," visualized with remarkable prescience an ideal community. The writings of *Francis Bacon*, also, contain some valuable additions to economic literature.

This was the period of great commercial expansion. The manorial had given way to a national economy. English traders were laying the foundations of the Empire, and the current economic writings were full of reference to England's foreign trade and maritime policy. Thus emerged the doctrine of **Mercantilism**, which

dominated British enterprise for a couple of centuries. As implied in the chapter on international trade (XVI, § 2), the early Bullionists had aimed at a " Balance of Bargain," maintaining that every transaction should result in a balance of precious metal due to the home country. This was hardly practicable or advisable, and the Mercantilists (who were closely related to the Bullionists) found it more expedient to advise the " Balance of Trade," whereby the total exports were to be greater than the total imports, thus allowing the balance on trade as a whole to be paid in the form of specie.

The policy of Mercantilism was extended in several directions; it became identified generally with the national expression of and interest in economic development. Exports were encouraged, and imports of many goods were subject to heavy duties or forbidden altogether. By the Navigation Acts, attempts were made to capture the shipping trade and wrest economic advantage from the foreigner. The whole doctrine was based on the assumption that in every exchange, if one party gains, the other must lose; needless to say, the home country was not to be the loser. This intense national economic feeling was not peculiar to England alone; in the seventeenth century it was characteristic of all the European States, particularly France and Prussia.

Thomas Mun (1621), while exposing the crudities of the former Bullionists, still adhered to the broad principles of Mercantilism; he was followed in this country by *Child*, *Temple*, and *Davenant*, who confined their attentions mainly to foreign trade. Other writers with a Mercantilist bias—though this gradually became less pronounced—were *Sir William Petty* (" Political Arithmetic," 1671), noteworthy as having employed statistical methods; *David Hume* (" Essays," 1752–23), a

critic of the system in its more pronounced forms; and *Sir James Steuart*, "the last of the Mercantilists," whose "Inquiry into the Principles of Political Economy" was issued in 1767, only nine years before Adam Smith's "Wealth of Nations."

The decay of gild regulation of industry and commerce was accompanied by a decline in the Mercantilist policy, which was too narrow and restrictive to satisfy the new conditions of the eighteenth century. There was a reaction against Mercantilism, particularly in France, where the **Physiocrats** or *Économistes* promulgated the new doctrines. The former term, by which the school is usually known, indicates the Law of Nature, which was held to govern all man's activities and guide them to the best common advantage. The rule of free competition was supreme; any attempt at State intervention was to be deprecated. The policy of "let alone," so popular in the eighteenth and early nineteenth centuries, was summed up in the famous expression: "*Laisser faire, laisser passer.*" What was best for the individual, was best for everybody; therefore remove the impediments to the full operation of the natural law, and let private enterprise have free play.

Chief among the Physiocrats was *Quesnay*, who is noted among other things for the stress he laid on the importance of agriculture. This, he said, was the true source of all wealth. Manufacture merely changed the form of things, and commerce distributed them. Land yielded a "*produit net*," or surplus, which did not arise in industry and trade. His conception of the surplus from land foreshadowed Ricardo's theory of rent, and led to the proposal even then of the single tax on land. *Gournay* was another leading Physiocrat, whose views, however, were not so dogmatic as those of Quesnay,

but were open enough to recognize the productiveness of industry and trade. Other members of the school were *Turgot* and *Cantillon*, who were interested largely in money, capital, and public finance. Discussion on the last subject was popular with all the Physiocrats, due doubtless to the very heavy taxation in eighteenth-century France.

The Physiocrats rendered a useful service in their destructive criticism of many of the older theories. On the positive side, they helped to distinguish economics from the other social sciences and applied scientific methods; they contributed useful knowledge on taxation and capital; while the emphasis they laid on the land and the derived surplus was of great consequence.

THE MODERN PERIOD.

All this was preparing the ground for *Adam Smith*, the outstanding figure in the whole of economic literature. His "Wealth of Nations" (1776) presented the most comprehensive and constructive work that had yet appeared. In order to get a proper view of Adam Smith's teaching, it is necessary to take his other writings into account. In the "Theory of the Moral Sentiments" (1759), he dealt with social philosophy and general conduct. In the work upon which he was engaged when he died, he treated of law and politics. The "Wealth of Nations" was the intermediate work. The three together demonstrated from various aspects his belief in the "Invisible Hand" which controlled man's actions in this world. But his successors severed the practical conclusions from the broader and deeper context, and converted the new philosophy into a doctrine of material individualism.

"An Inquiry into the Nature and Causes of the Wealth of Nations" not only served as a title, but as a

definition of what Adam Smith considered the scope of political economy. Book I deals with " the causes of improvements in the productive powers of labour, and . . . the order according to which its produce is naturally distributed among the different ranks of the people " ; it considers, in turn, the division of labour, money, prices, wages, profits, and rent. Different from the Physiocrats, Smith attributed the source of wealth not to land but to labour. Book II, embracing " the nature, accumulation, and employment of stock," discusses the nature of capital and interest. Book III surveys historically " the different progress of opulence in different nations " ; and Book IV, treating " of systems of political economy," contains a keen criticism of Mercantilism and its limitations. Book V, the last, examines " the revenue of the sovereign or commonwealth " : some of the rules there laid down respecting public finance, taxation, and debts are still of present application.

Again, the conditions of the age were reflected in the current economic writings. The Industrial Revolution was beginning, and Adam Smith fully realized the necessity of removing restrictions, particularly on foreign trade. Not that he altogether severed himself from the Mercantilists ; he still supported, for example, the Navigation Laws on the ground that defence was more important than opulence. Nevertheless his work marks the beginning of a new period in economic thought. Some of the abuses that were committed in the name of the new freedom of action (such as the refusal at first to introduce factory legislation, the repression of labour organizations, etc.) were due, apart from private motives, to the interpretation that innumerable followers put upon his writings rather than the views of Adam Smith himself.

The contemporaries and immediate successors of Smith suffer by comparison, but with the exception of Ricardo they added little to economic theory. *Malthus*'s doctrine of population was considered in Chapter II; his outlook would probably have been less pessimistic had he been able to foresee the results of man's inventiveness. *Bentham* was a jurist rather than an economist, but had considerable influence on economic thought and practice. His attack on the restrictive usury laws was followed (though not immediately) by their repeal. The *utilitarian* school, whose object was " the greatest happiness of the greatest number," is usually associated with Bentham as the central figure.

Adam Smith had combined the deductive and the inductive methods with remarkable skill. *David Ricardo* drew most of his inspiration from Smith's work, but, not possessing Smith's historic sense, concentrated on the abstract deductive method of reasoning. His " Principles of Political Economy and Taxation " (1817) showed a distinctly original line of thought. His theory of rent became generally adopted and, as shown in Chapter X, § 2, it has evolved into a theory which attempts to explain not merely the payment made for the use of land, but the remuneration that goes as " surplus " in more or less degree to all the agents of production. The social and practical inferences from the conception of rent are a distinctive feature of modern economics.

Following Adam Smith, Ricardo favoured a labour theory of value, but from his writings it is not clear whether he did not really mean a cost of production theory, so as to include a return to capital. Labour had its cost of production (subsistence) like everything else. It will be noted below how the rent and value doctrines of Ricardo, a capitalist and millionaire, were

converted by Lassalle, Marx, and others into strong Socialist contentions. Hence the statement that Ricardo was both " a prop and a menace to the middle classes."

Characteristic of Ricardo and his group was the cold dogmatic method of treatment, which at times tended to become so abstract as almost to squeeze out the human factor. The hard materialist and pessimistic doctrines earned for economics the epithet of " the dismal science." Economic laws were reduced to bald statements, and *N. W. Senior* (" Political Economy," 1836) was perhaps the most deductive and abstract of the school. He condensed the whole of economic tendency to four premises: (*a*) that every man desires to obtain additional wealth with as little sacrifice as possible; (*b*) that the population of the world is limited only by moral or physical evil or by fear of a deficiency of material comforts; (*c*) that the powers of the agents of production may be definitely increased by using their products in further production; (*d*) that agriculture is subject to diminishing returns. Senior also developed the abstinence theory of interest, which for a time was generally accepted.

Such was the early **Classical School**, which, despite its narrowness, considerably advanced economic analysis. Cost was taken as the basis of value; welfare increased or decreased with the stock of goods, the conception of diminishing utility not being applied. Their doctrines became the philosophical basis of the Manchester School, which was cosmopolitan in outlook and ardent in support of free trade between nations. The Classicists in Germany, though similar in many ways, were rather less abstract and more nationalist. *List* in the " National System of Political Economy " (1841) advocated a system which in some ways was akin to Mercantilism.

In France, the tone was more that of an idealist and optimistic liberalism; *Say* and *Bastiat* were the chief exponents.

It was now time for all the various doctrines to be brought together and co-ordinated. This was done by *J. S. Mill*, who is sometimes regarded as the next in line to Adam Smith. Mill, too, was a social philosopher, and did much to widen the view of economics. Though the influence of a strict Ricardian training is to be seen in his writings, he was broad-minded enough to note and emphasize the "social" element in economics which his predecessors had tended to suppress. J. S. Mill did not add much that was new in the way of doctrine; his theory of the wages fund, popular for a time, was soon found to be defective. (*See* above, Chapter VIII, § 2.) His chief work was to give economics a new spirit; he moulded it into something more than a mere materialist and "dismal" sicence, and helped to make welfare rather than wealth the test of social progress. Mill's later writings were not so individualist in tone as his earlier views, though he still clung, on the whole, to the rights of the individual. He states that "*Laisser faire* should be the general practice; every departure from it, unless required by some great good, is a certain evil." Speaking of Government interference, he concludes his "Principles" (1848) thus: "Even in the best state which society has yet reached, it is lamentable to think how great a proportion of all the efforts and talents in the world are employed in merely neutralizing one another. It is the proper end of Government to reduce this wretched waste to the smallest possible amount, by taking such measures as shall cause the energies now spent by mankind in injuring one another, or in protecting themselves against

injury, to be turned to the legitimate employment of the human faculties, that of compelling the powers of Nature to be more and more subservient to physical and moral good."

From Mill onwards, at least three lines of development in economic reasoning can be traced; these correspond to the "Historical School," the Socialist writers, and the "Neo-Classical School."

It was inevitable that there should be a stronger reaction against the abstract reasoning followed by the Classical School than was evident in Mill's writings. The **Historical School** attacked the deductive method of inquiry and tried to place the science on a historical basis, substituting the inductive for the deductive principles. It was contended that without reference to the facts of life, theory tended to soar above realities. Reasoning should be more concrete and be subject to verification whenever possible. In Germany, the reaction against the old methods was very marked. *Roscher*, one of the earliest of the school, maintained that political economy should be studied in close relation to the other social sciences; that in order to derive universal laws, study should be made not of one set of people, but of several, and particular attention should be paid to ancient races who, having run their full course, are peculiarly instructive. He was followed by *Knies*, *Schmoller*, and many others in Germany and elsewhere. In England, the chief exponents of the historical method have been *Rogers*, *Leslie*, *Toynbee*, *Cunningham*, and *Sir William Ashley*.

But, as stated in the early pages, neither school working alone can attain perfect results. Induction and deduction should not be alternative but supplementary. Yet the Historical School have undoubtedly

rendered great service. They have emphasized the importance of economic history and contributed useful studies on the subject; they have thus not merely questioned the old abstract reasoning, but provided the means for its verification.

Much could be written about the growth of **Socialism.** The works of Plato and More have been previously mentioned. *Rousseau* and *Godwin* in the eighteenth century helped to spread the doctrine; and in the first half of the nineteenth century a semi-academic and utopian form of Socialism was advocated by *St. Simon*, *Fourier*, *Blanc*, and others in France; *Owen* and *Thompson* in England. But Socialism did not gain much force until the second half of the century, when the new "scientific" Socialism was developed. Its chief exponents were *Rodbertus* and *Marx*, with *Lassalle* as the militant organizer. The last named is often thought of in connection with the Iron Law of Wages (Chapter X, § 2), which was held to be the only explanation under a capitalist system.

The new Socialism was termed "scientific" in contrast to the utopianism of the earlier writers. Karl Marx, who was the most potent force in the movement, was, like other German economists, historically-minded; his "Capital" (Vol. I, 1867) contains much that is based on observation, accompanied by an intense deductive analysis, based partly on the writings of Smith and Ricardo, who provided a form of labour theory of value. Adopting a "dialectic" method of investigation, he attempted to show that the basis of society was economic, that the prime motive force of every kind of activity is the production of the means of life. He maintained that in modern communities there were two main classes, one possessing labour

power, the other the means of production. The latter class was created by the appropriation of the " surplus value," measured by the difference between the real productivity of labour and the actual wage paid. Being a firm believer in the evolutionary process, he contended that capitalist organization would become increasingly concentrated until the means of production were held by comparatively few capitalists. This would only be antecedent to the community taking over what had been expropriated. Thus Marx's views resolve themselves into (*a*) the materialist conception of history, (*b*) the class-warfare, and (*c*) the evolution and ultimate extinction of capitalism.

Though much of Marx's doctrine has been modified or even abandoned, he still exerts, whether directly or indirectly, a great influence on Socialist thought and action. Besides his direct followers, other Socialist movements owe a certain debt to his historic, albeit materialist, method of treatment. There is no doubt that, whatever one's opinions on collectivist, guild socialist, or communist principles, the movement taken as a whole provides a valuable stimulus to economic inquiry.

There remain those economists whose methods resemble in some ways those of the old Classicists ; for want of a better name they have been termed the **Neo-Classical School.** Deductive reasoning is much in evidence, but there is not the same tendency to over-abstraction as was prevalent in the early part of last century. Historical research and the growing use of statistical records have served to check imaginative flights and keep economic science within the bounds of reality. *Cairnes* (1874) re-stated the theory of value and introduced the conception of " non-competing

groups." In a sense, he was the link between the old and the new Classicists. *W. S. Jevons* applied statistical and mathematical methods, giving economics a definitely scientific semblance. In his "Theory of Political Economy" (1871) and other works, he discussed the conception of final utility, and made a useful analysis of exchange, money, and prices.

Less mathematical and more psychological were the Austrian economists, representative of whom were *Menger*, *Wieser*, and *Böhm-Bawerk*. They are noteworthy as having worked out the utility theory of value, thus controverting the cost of production theory of the older Classical School. Böhm-Bawerk in his "Positive Theory of Capital" (1888) submitted the theory of interest as the money-equivalent of the difference between present and future satisfactions. Discussion on interest has been very common among the Austrian School, but the theory of wages has been given scant attention.

In America important groups of economists have been much in evidence. Professors *Ely* and *Taussig*, among others, adopting an objective point of view, stress the cost of production side of value and favour a broad application of the Ricardian doctrine of rent to all forms of distribution. In some ways different are Professors *Clark* and *Fisher*, who lean towards the subjective and psychological method of approach, and so resemble the Austrian School. Clark's "Distribution of Wealth" (1899) has for its theme the tendency under "static" conditions for the factors of production to receive shares corresponding to, and measured by, the productivity of their marginal increments. Fisher has made fruitful inquiry into capital and interest. Like Böhm-Bawerk, he supports the *agio* or time-preference theory of interest; like Jevons, he is prone to a mathematical mode of treatment.

Chief among British economists in recent years is Dr. *Marshall*, whose "Principles of Economics" (1st Edition, 1890) and other writings rank him in line with Adam Smith and J. S. Mill. In many ways Classical in outlook, he is fully cognizant of the need for close observation of facts. He combines the deductive with the inductive, theory with realism. He brings together the cost of production ideas of the Classicists and the utility concepts of the Austrians. The analogy of the blades of a pair of scissors[1] (cost and utility), each of which cuts but not without the aid of the other, is typical of the well-balanced reasoning in Marshall's works. Besides the harmonizing of the different theories, his constructive powers have resulted in many new ideas and much new light on the old. The extension of the theory of rents or surpluses owes much to Marshall (as well as to *Hobson*), but most characteristic, perhaps, is the belief in the principle of continuity: "There is a unity underlying all the different parts of the theories of prices, wages, and profits. The remuneration of every kind of work, the interest on capital, and the prices of commodities are determined in the long run by competition according to what is fundamentally the same law. This law of Normal Value has many varieties of detail and takes many different forms. But in every form it exhibits value as determined by certain relations of demand and supply" ("Economics of Industry").

In the development of modern economic thought, the pendulum has swung with a fair regularity between the shares of attention given respectively to production and distribution. Thirty years ago a certain reaction took place against the emphasis on production; and

[1] *See* above, p. 69.

economists largely concentrated on the question of distribution. The time now appears to have been reached for a movement, if not to the first position, to a point nearer the golden mean. Professor *Pigou*, for example, in the " Economics of Welfare " (1920), recognizes that problems such as that of wages cannot be dissociated from the organization of production. Similarly with regard to taxation, it is not merely a matter of noting the effects on the distribution of the social product (though this is of great importance), but also of examining the influence on the community's productive capacity.

But whether the main outlook has been on production or distribution, one conception has been gradually advancing and extending, namely, that of the " surplus " element in its various manifestations. The Physiocrats observed that land yielded a surplus; the Classicists went further and noted the same phenomenon in investments in land. Technically, an intensive as well as an extensive margin was discovered. The idea of the " unearned increment " was developed by J. S. Mill, and eventually the notion was applied to interest, profits, and wages, demonstrating the existence of a producer's surplus in different forms. The scope of the conception was still further widened when, resting upon utility rather than value, it revealed the consumer's surplus. We have seen in the above pages that the doctrine as a whole is not merely of academic interest, but of great bearing upon such questions as taxation, Government intervention and general reconstruction.

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